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OBJECTIONS TO A MONETARY STANDARD BASED ON INDEX NUMBERS

The attention of the public has been fixed for some time on the continued rise of prices and the increase in the cost of living commonly supposed to be a consequence. From time to time suggestions have been made with a view of providing checks or remedies for changes in prices. The most notable of recent years is that brilliant suggestion recently made by Professor Irving Fisher for abstracting seigniorage on the coinage of gold in order to keep the value of the gold coin at a point determined by index numbers; or, in other words, by the indirect application of the so-called tabular or multiple standard. But we must be on our guard against permitting ourselves to be carried away with belief in the possible success of a brilliant device without careful consideration of the question whether the thing that is accomplished by this device is the thing at which after all we are aiming.

Public uneasiness aroused by the change of prices in one direction or another over considerable periods and to a considerable degree, is not a new phenomenon; nor are attempts to meet the difficulties, real or supposed, which their changes cause, of recent origin. Students of the matter have not yet forgotten the quarter of a century of falling prices beginning in the early seventies and lasting until some dozen years ago, nor the world-wide agitation in behalf of the establishment of international bimetallism as a cure for the ills which were supposed to arise from that long-continued decline. Before that agitation, and yet doubtless within the memory of some men still living, was that of the late forties and early fifties of the nineteenth century, which led to the brilliant efforts of Stanley Jevons to make a clear analysis of the situation and suggest a remedy. His words might almost have been written in 1912 instead of 1869: "I cannot help then reasserting with the utmost confidence that a real rise of prices, to the extent of 18 per cent, as measured by fifty chief commodities, has been estab-

lished since the year 1849. . . . Nor can we well avoid attributing it to the effect of the gold discoveries."

Historical attempts to correct price changes may be grouped into four classes. First are the well-known instances of efforts of the authorities in almost every country to fix the prices of staple products. We have a recrudescence of these proposals in the sporadic demands expressed in the public press for the government to regulate trusts by regulating the prices of their products, and also in the demand to regulate the prices of products of public utilities companies. There is justification for price regulations of the latter sort that is not applicable at all to attempts to regulate the prices of competitively made products.

The second method to which resort has been had for preventing the alleged loss from price changes is the attempt to find an ideal or unvarying standard. Accounts of this are to be found in theoretical literature rather than in legislation or social programs.

The third class of proposals includes those which would change the money supply without statistical information indicating the amount of change needed, or the degree of rapidity with which it should proceed. The most important of these proposals is bimetallism, which aimed to cure the ills of a falling price period, but would not be applicable to those of a period like the present.

The fourth method, known as the tabular standard, is that which attempts to determine the change in the average of prices and to pay in money in amounts proportionate to the degree of this change. A fifth method is that proposed by Professor Irving Fisher. He would regulate the price average by controlling the money supply through a seigniorage charge determined by the tabular standard. This is really an indirect way of applying the tabular standard, and whatever defects the latter has are involved in his plan. This article is essentially a criticism of the tabular standard method of regulating prices.

Without going further back than the last century, we find several long periods in each of which what is called the price average tended in one direction. For forty years following 1809 the trend of prices was downward. Jevons estimates the fall at 145 per cent, the rise in the twenty-year period preceding the first date having been, according to him, as great. For the twenty-odd years succeeding 1849 the general trend again was upward. Beginning in the early seventies, however, we have the period of fall already mentioned, and we are now in a period of fifteen or sixteen years, in which prices have been steadily rising.

The agitation for the correction of evils attributed to changes in prices comes from different sources, according as the trend of the change is upward or downward. In the period of falling prices beginning in the early seventies, it was the interests of producers and debtors that were at the basis of the discussion, and it was the removal of the injuries or injustice which they were compelled to suffer through the fall of prices that was the aim of the schemes put forward during that period. The increasing burden of public debts, of mortgages, of long-time private debts, appealed to both the agitator and the student as sufficient to justify attempts to change the existing conditions. It was in this period that the demand for the establishment of international bimetallism, the demand for the remonetization of silver on a larger scale, and the still wilder proposition for the demonetization of gold, occupied public attention. All these schemes aimed at an indefinite increase in the money supply on the tacit assumption that an increased money supply will cause the desired rise in prices. Some people, unwilling to sanction an indefinite increase of the money supply by bimetallism or otherwise, proposed the use of the tabular standard for settling deferred payments. Meantime, throughout the period, all holders of fixed money incomes from different sources enjoyed the benefits of falling prices. They were able, with their money income, to buy more largely as the years went by. In spite of the fall of prices there was an unprecedented development of industry and trade in the period as a whole.

The agitation of the present period is not in behalf of producers or debtors. It is the receiver of a fixed or slowly changing money income or wage whose interests appeal to the reformer, the student, or the philanthropist. It is pointed out that the price average is rising more rapidly than wages or fixed money incomes, and that hardship is therefore entailed upon people who get these. Producers and long-time debtors are gaining instead of losing, as was the case in the period of falling prices; whereas consumers and creditors are losing, or to speak more correctly, are finding that the money which they get is buying less and less as the years go by.

Whatever hardships were suffered by the injured classes in the period of falling prices, are not compensated by the gains of the same classes in the period of rising prices. They are the same economic classes, indeed, but not wholly the same individuals.

In the opinion of some a change in the price average may be

regarded as a "social change"; or a change due to general influences, like changes in the value of land, and involves, therefore, what may be called an unearned increment. In their opinion, since it is a value due to social progress, it belongs to the community as a whole and should go to it, if some way can be devised to take it. There is some force in this view. But even if it were possible to award to the community at large any gain or loss of this kind, the amount so accorded would in some way be distributed among the members of the community with probably as much inequity as now. If, however, what we have in mind is the prevention of the absorption by individuals of a supposed unearned increment of value caused by changes in the price average, and its assignment to the community as a group or unit, all we need is a knowledge of the amount of change and some means for retaining this increment of value.

But the question of equity as commonly thought of in connection with price changes concerns the relative claims of debtors and creditors, sellers and buyers, wage-payers and wage-receivers, the payers and receivers of fixed money incomes. The problem is to prevent one of these parties from securing at the expense of the other any advantage that originates in price changes. What, from this point of view, would constitute a fair standard of value—one which will preserve the equities of exchange between the payer and receiver of money?

By a standard unit of value is ordinarily meant the value imputed to a definite quantity of a selected good. A stable standard or unit of value would therefore be a quantity of goods whose value did not change. The quest is to find an amount of value thus embodied in some article which as time passes will remain unchanged so far as concerns influences originating in the selected article. The dream of the advocates of an unvarying standard is to fix or objectivize an abstract quantity of value as unvarying as the unit of length. This amount of value must necessarily attach to different amounts of the same article at different times. In order to realize such a unit some think it sufficient to determine the quantity of goods to which is imputed, on the average, the value of the unit. In mathematical theory this is a correct solution of the problem. From the point of view of economic theory, however, it involves a fallacy, whether payment is to be made in units of goods or in gold whose amount is determined by the amount of units of goods for which it exchanges from time to

time. The fallacy lies here: Equal amounts of value under the hypothesis import unequal or different amounts of goods received and returned. This is so because the value imputed to a given quantity of goods today is different from what it was yesterday. The cause of this difference may be a change in the psychological element in the value of the articles, or it may be due to a physical scarcity or abundance of the articles, a change of supply; both elements of value may have changed. To return the same quantity of value is, therefore, not to return either the same articles or the same quantities of the same articles. It is simply to return "average" value or "social" value, composed of elements which to the individual who received them may have very different valuations from those imputed to them in general on the average or by society. Therefore his "welfare" is affected; but it is welfare that is the very purpose of the effort to secure a stable standard of value. It is the return of welfare that is of importance to the individual, and its elements for any individual are likely to be different from those of the welfare that may be attributed to any unit of "average" or "social" value.

In order to get a clear notion of the character of a just standard or unit of value, we must think of the money article as serving monetary purposes only. Mill remarks that theoretically there can be no less important thing in the social economy than the medium of exchange. While this statement taken by itself is open to criticism, it is doubtless true in the sense that Mill had in mind. In a frictionless economy, that imaginary state of affairs so often referred to in economic reading, in which competition is perfect and competitors intelligent enough to know and strong enough to care for their own interests, and in which the medium of exchange serves no other purpose than to effect exchanges and varies in quantity immediately in response to changes in amount of goods offered for sale, his statement would be true. It is conditions like these that we must have in mind in forming our notion of an ideal standard or unit of value. The money article, as money, derives its value entirely from its service in exchange; its volume is determined wholly by the demand for it in order to make exchanges. Its value reflects the changed amounts of goods offered and in itself it is simply a common denominator of relative values.

A just standard of value is one which, in each successive series of purchases, enables the purchasers and the sellers to maintain the

same relative economic positions so far as these depend on the amounts of money they possess. As ordinarily conceived, it is a means of preventing one individual or class from securing the gain, and another from suffering the loss, which arises from a change in the money supply. For, looking at the matter in a broad way, without inquiry into the character or causes of particular price changes, it would seem that a just standard would apportion any gain or loss due to changes in the supply of money so that creditors and debtors, wage-payers and wage-receivers, shall have the same relative purchasing efficiency as they had before the changes. In other words, it would be a standard which would prevent changes in the price average, due to changing money supply only, from inflicting loss or according gain to one at the expense of the others. As against each other, creditor and debtor have each an equitable claim to share in whatever gain may be caused by a change which is the result of some economic movement in the social group as a whole. Perhaps the best general statement of the solution is that the welfare of the community will be promoted by a method which apportions the loss or gain between the parties according to their economic efficiency as contributors to the general welfare. How far this general proposition is applicable, however, in special cases of price changes, depends on the causes of the changes.

It must be remembered that the value imputed at any moment to a given quantity of goods partly depends upon the amount of other goods offered in exchange for that quantity. Therefore, any proposal to establish as a standard a varying quantity of goods embodying an unchanging amount of value, is a proposal to establish a unit of measure to determine changes in the value of goods, when from two causes the thing in which the unit of value itself is embodied changes in respect to the amount of value a given quantity of it contains: changes on the demand or goods side, and changes on its own supply side. Now the very purpose of a unit of measure of value is to measure changes of value induced by or originating in the supply of goods only. The supply of the measure of value itself should have no effect upon the amount of value embodied in a given quantity of it; but commodity money is an article embodying value. Its value changes with its supply, altogether irrespective of changes in the value of goods which it is used to buy. If we could separate the changes due to the varying supply of the money article from the changes

due to the varying supply of the goods that it buys, and measure and correct the former, we would have a real solution of the problem of preventing price changes due to the varying supply of the money itself. No such solution has been found. A comparison of the ratios of increase of production of goods and of gold, even if satisfactory statistics were available, does not enable us to determine what part of the price advance is due to goods and what part to gold. For the elasticity of demand differs for different articles. A small change in supply of goods may cause a large change in price; but this is not true of gold. Hence, every proposal made involves the idea that the unit of value shall correct not only the changes due to the varying supply of the money article, but the changes originating in the varying supply of goods. But we do not want any corrective for the latter, except their own changing costs and supplies. The very purpose of industry and trade is to induce changes in the supply of goods so as to promote welfare, for welfare depends upon the multiplication of commodities.

All the proposals based on the tabular standard or index numbers for regulating the price level assume the quantity theory of money in some of its forms. It is not desirable now to go into the discussion of this subject. It is necessary, however, to point out the erroneousness of the assumption that all price changes arise from or are attributable to changes in the money supply. In the equation of prices the quantity of money is one element. It is illogical to say that it is the chief element. As Mill has remarked somewhere, since two and three are both necessary factors of six, it is incorrect to say that three is a more important factor than two. It is true that a change in the money supply may change the price average, and may cause a readjustment of relative prices. It is equally true that the same effects may be produced by a change in the quantity of goods, or in the rapidity of turn-over either of goods or of money. A stable standard is one which would correct those changes of which variations in the money supply are causal, for the purpose of measuring changes that originate in the other elements. As already remarked, every proposal so far made involves the correction not only of the money-supply-caused changes, but of the goods-supply-caused changes. This is to defeat in part the purpose for which a stable standard is wanted.

The only kind of standard which would answer the purpose

would be one which had no value as a commodity, and whose supply was induced and varied by the varying amounts of goods and by those only. An increase or diminution of its supply would be impossible, except as the volume of exchanges to be made increased or diminished. In other words, a money article must be one that gets its value from the demand for monetary uses and from that demand only. In the absence of a credit system the quantity relation between goods offered and money used in exchanges would be perfect, but as has been frequently pointed out, the only kind of money that will satisfy this condition is inconvertible paper.

Since it has been found impossible thus far to devise a single standard that will not vary, resort has been made to indirect methods of value-measurement. Several have been suggested.

Twenty-five years ago Professor Edgeworth, in a very valuable study of the whole subject¹ classified the methods which up to that time had been suggested. I think that no method involving any new principles has been proposed since that time. He pointed out that we may have two classes of solutions.

(1) A solution irrespective of any hypothesis as to the cause of the changes. This solution may be applied with the purpose of keeping the unit of measure constantly equivalent to the same quantity or value of goods or a quantity or value varying on some sliding scale.

(2) The other class of solutions involves consideration of the cause or causes of changes in prices and may or may not have regard to the quantities of commodities for which the unit of the assumed standard may exchange from time to time. The first class of solutions includes the tabular standard; the second, such schemes as bimetallism, remonetization of silver, or the increase or decrease of the medium of exchange in a general way without reference to specific units of measurement, on the supposition that the price changes are due to changes in the supply of money.

Doubtless because it is the easiest and most convenient the index number method of measuring price changes and its use as a basis for maintaining equilibrium has come into more general use. It will suffice for our present purpose, therefore, to discuss the principles involved in that particular method. In principle, the tabular standard is the selection, as a mathematical unit of value-measurement, of an average derived from prices of goods

¹ *Report Brit. Assoc. Advancement of Science, 1887.*

at a selected time, with which average, or unit, averages computed from similar data at other times may be compared and the differences adjusted. It attempts to restore equal average value by giving varying amounts of goods.

There are really two matters involved in the adjustment of prices, namely: how to maintain or restore the average of prices with the consequences of such action; and how to keep relative prices so adjusted that for the same budget of expenditure changes in prices will not induce changes in the cost of living.

Without going into hair-splitting distinctions it suffices for our present purpose to accept as an arithmetic statement of the average of prices, the index number obtained from ordinary tables of prices. Payment by the use of the index number as a unit would be payment by what is called the tabular or multiple standard. The index number or the average of prices at any time may be taken as indicating the disturbance of the price equilibrium at the moment, and the maintenance of that price equilibrium, or its restoration, is theoretically simple compared with the adjustment of prices so as to prevent an increase in the cost of living.

It is an old criticism of the tabular standard that it is based upon prices of a small number of articles, and therefore not representative of the full circle of expenditure. For our present purpose it is not necessary to consider either this objection or others that have been made concerning the source of prices, the omission of retail prices, and so on. So far as the present discussion is concerned, we may admit the possibility of framing a perfect series of index numbers, and therefore a perfect tabular standard, so far as completeness of data and their representatives are concerned. Out of these data, however, what we will get is still an average. It is an imaginary price whose changes represent changes in the group of articles as a whole. Theoretically, it is possible to measure the changes of this average from time to time; and theoretically, again, it is very likely that the changes could be offset, readjusted, possibly anticipated, through control of the supply of money either directly, or indirectly by some such device as, for example, Professor Fisher has proposed—the restoration of seigniorage. But slight study of the equation of prices is needed to bring out this fact. That equation may be written $GR = Mr + Cr$, where G stands for goods sold, M for the volume of money, C for the volume of credit, and the r 's for their respective rapidities of turn-over. If for the moment we assume, what

in the opinion of the writer is not true, although Professor Fisher thinks the contrary, that C has a constant ratio to M , we may exclude for the moment the consideration of the C element. Now all that the maintenance of the price average imports is the maintenance of the equality of the two sides of this equation, irrespective of the factor in which changes originate. The equality between the two numbers of the equation may be disturbed by the change in the volume of goods, in the rapidity of their sale, in the volume of money, or in what is called its velocity or circulation. But equality may be restored by an appropriate change in any one of them.

If, as is sometimes done, we regard the equation of prices as we think of a series of inter-communicating tubes of different diameters, it is possible to maintain the average level of a liquid in all the tubes by the manipulation of the quantity of liquid in any one of them. In other words, it is possible in theory to keep the price average steady by manipulating the volume of money alone, whatever may be the practical difficulties in the application of the theory. But the hydrostatic illustration fails because the adjustment or restoration of the price average induces new forces that operate on all the factors in the problem, some of them directly tending to offset the adjustment which the change was made to bring about. That is not true in a series of tubes filled with water. There is no psychological element there. There is no factor in the problem that is conscious of the change and undertakes to counteract it.

For, although the disturbed average of prices may be restored by the manipulation of one of the constituents of the price equation, it is not a matter of indifference to society what method is adopted. If the volume of goods be increased, the increase will diffuse itself throughout the existing economic classes in accordance with the prevailing equities, or inequities, of distribution. General prosperity is increased. If the equilibrium be restored by diminishing the volume of money this would not be true even if the distribution of the withdrawal were in accord with the existing equities, or inequities, of distribution. But it would not so diffuse itself in the latter case. For the more abundant goods, or some goods, become, the less the demand for them by the wealthier classes; the more of them are available, therefore, for the poorer classes. It is not so with money, because the demand for it by the wealthier classes is as great as before to spend on the goods they now want.

If prices are rising because of lessened production, the restoration of the former average of prices by artificial diminution of the money supply will be of little advantage. For it will not increase the amount of goods offered for sale. There simply is not as much of anything as before. No manipulation of the money supply will alter this fact or lessen in any degree hardship caused in the way of increased cost of living. Therefore, when prices are rising it becomes us to determine whether the rise is due to relative scarcity of goods, or to some other cause. It is obvious, therefore, that any scheme for the maintenance of the level of prices based on the manipulation of the supply of money alone can be justified, if at all, only so far as it is applicable to changes in prices caused by changes in the supply of money, and not to changes in prices caused by variations in the supply of goods, or the rapidity of their sale, or, as I hope to show later, in the volume of credit. This view limits very materially any advantages that may be supposed to accrue from devices that affect the money supply.

In the discussion of rising prices much emphasis has been properly placed upon the largely increased supply of gold as the cause of the change. But we cannot rest here. We must ask whether other causes have operated and also whether the increased supply of gold is to be regarded as the ultimate cause of the change, or rather is not itself one of the results of more fundamental forces which have called it out as a cure or balance of some other tendencies. It certainly is remarkable if the alternate increase and decrease of the gold supply in the past one hundred or one hundred and fifty years is accidental in the sense that the increased supply has been discovered, or new methods of increasing it have been discovered, so regularly as the facts would indicate. Must we not ask rather whether the gold supply is not a consequence of the operation of some as yet unknown social law which brings out this increased supply to meet or to stimulate the growing and changing needs of industry? If so, to check this increase of money supply would be to check those influences or forces, whatever they are, that are promoting industry and trade. To think of the increased gold supply as an accident, and the cause of the hardships that price changes produce, is to take too narrow a view of the circumstances. The cheapened processes of producing gold have been brought about by the need for more gold instead of the reverse being true. To be sure, a

movement in either direction, once started, is likely to overshoot the mark. The regularity of the alternate increase and falling off of the gold supply of itself arouses a suspicion that the movement is a consequence of some yet unrecognized forces, a cure for some existing ills, and not itself primarily a cause of ills. There would seem to be a field of inquiry here that no one has yet touched.

Moreover, for the past fifteen or twenty years production and trade have been increasing by leaps and bounds. More trade has needed more medium of exchange, and more medium of exchange has reacted in producing more trade. It is not necessary for the purposes of this article to go into the presentation of statistics of production and trade. There are certain generally acknowledged facts with reference to the production of some articles of wide consumption which serve the purpose. When we complain of the rising cost of living we think of the increase in the price of beef and perhaps of wheat and its products. Making all due allowance for the manipulation of prices by monopolies, it can hardly be disputed that for years there has been a growing scarcity of beef, and therefore of meat products. For some reason, in Illinois, for example, for a decade or more farmers have been pushing agronomic agriculture to the detriment of animal husbandry. The same is true of other states which once had considerable surpluses of beef for sale. The prices of beef and its products therefore have gone up. No restoration of the price level will increase the supply of beef. Those in whose budgets it figures cannot get as much of it as they used to get, for there simply is not enough to go around in the old way. In crop products too, there have been several seasons of relative shortage, and the effects of the shortage of a single season are spread over several years. We have practically ceased to export wheat and beef, and the foreigners we formerly fed must find their supply elsewhere.

In addition to the difficulty of adjusting the average of prices by injection or withdrawal of money is the greater difficulty of distributing any additional supply of money, or withdrawing any portion, so as to preserve existing economic relations among classes and individuals. If the money supply were costless, so that it continuously changed only in response to and in proportion to demand, or supply of goods, and if the distribution of the extra supply of money were immediately effected among income receivers so as to preserve their previous relative economic po-

sitions, then we might hope to accomplish the proposed purpose; but the supply of money is from independent producers working for profit by providing this supply and not directly in response to the changing volume of production and trade. The distribution of any extra supply is a double one. It must be distributed among the classes and individuals who receive money income in a way to preserve their former monetary relationships, and the individuals in turn must expend it in their budgets in such a way as to keep the items of their budgets in the same relative positions. The first of these distributions or withdrawals could only take place as it does now. It would spread itself after intervals from one class to another. The monetary relations of different classes would not be different and relative welfare would be unchanged. But the problem is to get proportionately more to those who now have least. The hardship is due to the slowness of adjustment of money supply to changing real costs of production. This would not be prevented by the restoration of a raised or lowered average of prices, and it is restoration and not continuous maintenance that is possible, even under Professor Fisher's plan, so long as the gold supply is not controlled but produced for profit.

The second part of the distribution of a new money supply is in individual expenditure. It is sometimes possible here to reduce or prevent higher cost of living by readjustment of expenditure. There is some reason to think that present high cost of living for most people is due in part to higher standards of living. This is not true of those whose income affords a bare subsistence and must be spent on the bare necessities of life. But some at least of these articles are high because their production has not kept pace with population. No mere change in the volume of money would bring them any more within reach of the people on the margin of subsistence. What is needed here is a juster distribution of wealth. But for many people higher prices of some things are offset in the budget by lower prices of others. One ray of light is thrown on this point by the tremendous growth of certain kinds of amusement, like moving picture shows. The "middle class" at any rate is finding it possible to spend more on such things in the face of higher prices. Wheat has risen, but sugar, for example, has fallen. A readjustment of expenditure may secure as high a standard of living without much if any increase in total expenditure. Whether or not this is the case at any time

is a question of fact to be determined by the evidence. The evidence at present is more or less disputed. In this connection Professor Patten's remarks on family budgets in his recent monograph on the reconstruction of economic theory are very pertinent.

Another matter to be considered in connection with an effort to keep the price average steady by any plan based on index numbers is the reaction on production. As has been remarked, such a plan attempts to remedy, by changes on the money side of the price equation, changes which originate both on the money and on the goods side. Now changes in the values of the latter should have free play in a competitive economy. They are the causes or results of the forces that constitute competition. They are the changes that it is the purpose of a monetary unit to measure. It is otherwise with the changes of prices that originate in the money unit itself. They are the things we would like to prevent. To vary the unit of value in a way to offset changes on the goods side of the price equation is to check the operation of forces which in a competitive industry we want to encourage. It would tend to deprive the abler producers of their opportunities and gains when prices are changing. It would not be to their interest to lower costs if immediately the saving were offset partly or wholly by a change in the price of their goods through manipulation of the money supply. On the other hand, when prices are rising the producer will not respond to the stimulus for a larger output if by the time the increase of output is made its advantage is to be lost in part or entirely by changing the price average.

Moreover, the producer would have difficulty in adjusting his costs at every change of the price average by a device based on the tabular standard. For a readjustment of the general price average will not diffuse itself among relative prices without disturbing these. We know that the elasticity of demand is not the same for all articles. Even if an addition to the money supply distributed itself in the first instance according to the scale of existing relative prices, a new scale of relative prices would probably emerge at once, because the effect on the demands for the different goods would not be proportionate. This would be a disturbing factor in the cost of future production, and would lead immediately to a new adjustment of relative prices and in turn to the need for a new adjustment of the price average.

We must remember that we may have the same average of

prices with very different scales of relative values. To push up the average by an addition to the money supply, for example, will not help the producer who spends his income mainly on a raw material whose price is one element in the table but which has fallen or risen while the prices of other articles were going in the opposite direction. It is poor comfort to him to have general prices raised on the ground that most articles have fallen if the article which constitutes his main cost has meantime risen. If prices fall on account of lowered cost of production, the movement, if uninterfered with, will tend to check production in the next period. It is a common experience that an oversupply of grain, for example, through one or two years, will be succeeded by a smaller average before long. This is an attempt to adjust the price average to correct the fall, and the effect of the correction will be felt when the smaller product of the next production period comes into the market. The effect is to push prices back again. If, in the meantime, an effort has been made to do this independently by the manipulation of the money supply, a twofold impetus is given to the movement.

Nor can we pass by the possible effects on wages of adjusting the price average. The present demand to secure a stable average of prices is said primarily to be in behalf of the wage-earner. On the face of the matter this appears true. It is not clear, however, that any benefit that might come to him in this way would not be offset in other ways. In the first place, as has been pointed out, the hardship to the wage-receiver is caused not by an increase of the money supply, but by the fact that it is not immediately diffused among the various economic classes of society. It spreads itself, as Cairnes pointed out, by jerks. It benefits the class that first receives it. Its diffusion is brought about only by a struggle. When prices are disturbed and laborers struggling to have their money wages raised, they would have an added difficulty if whatever hardship they were experiencing were ostensibly to be removed by the adjustment of prices. Since that adjustment cannot be made continuous, and since the term before it would take place under any scheme would not be long, the conditions which would justify their insistence on raised wages would not continue long enough to secure them. Again, producers in industries whose costs fell during a period through which the price average did not change would have less inducement to share the benefits of the lowered costs with their wage-

receivers in their industry. Why should they? If the latter cannot by struggle force up their wages, whatever advance might be made will be rendered unnecessary by changing the price average.

Such, in the writer's opinion, are the difficulties in the way of the success of any plan for keeping prices steady through a direct variation of the money supply on the basis of index numbers. Are they met by the indirect application of the tabular standard whereby the dollar would be kept steady in value by the abstraction of more or less seigniorage? It is difficult for the writer to see that they are. When in a period of rising prices a sum of gold is presented for coinage, seigniorage will be exacted in an amount dependent on the change of the index number, and the rest will be coined into dollars. The change of prices on which the seigniorage, and therefore the additional supply of money, is based, is still the change in the average, irrespective of the side of the price equation on which it originates. The plan is based on the supposition that all changes in the price average can, and may properly, be corrected by adjustment of the money supply. We have seen that in mathematical theory they can be, but that there is reason to doubt that a corresponding economic adjustment will follow, in the sense of promoting welfare or diminishing the difficulties of relative scarcity. In so far as high prices are caused by relative scarcity of goods more of these new dollars will get into the hands of the economically strong, just as dollars do now, and the total relative purchasing powers of the economic classes will be substantially unchanged. Moreover, under this plan, the money supply still increases. It is reduced in amount, to be sure, and so far as the corrective needed is a reduction of the money supply its operation in this respect would be good. It is, however, the dollar put into circulation and not the seigniorage kept out of it that affects prices. There seems to be no necessary connection between the percentage of change in the price average and the amount of seigniorage which it would be necessary to withdraw to keep that average from rising further. The direct connection at any rate is between the change in the average, and the new supply of money. The best that can be said of the plan is that it would retard the influx of an increased gold supply.

The writer has expressed doubt of the correctness of Professor Fisher's statement that the volume of credit has a constant relation to money. Professor Fisher's argument is admirably put

and well supported, but hardly seems to the writer conclusive. There is a usual, or if you please, a normal, volume of credit carried on the basis of a given money supply. That volume, however, may be very much expanded on occasion. There is a limit beyond which it cannot be expanded. At this limit there is doubtless a constant relation between the volume of credit and the money supply on which it rests. Below this maximum there is room for all sorts of variations in the relationship. When through a considerable period industry and trade have been expanding so rapidly as to demand a more rapid increase in the means of exchange than the money supply provides, credit exchanges will be pushed to and maintained at the limit of proportionality to money supply for a considerable time. There will in time be pressure to increase the money basis of credit, and the supply of money will be stimulated. Activity in providing this supply will in time overdo the needs of the situation, and for a period of years money exchanges will grow more rapidly than credit exchanges. This is particularly true in a country like our own with large areas in which newly established production calls for money rather than credit payment. It is also true, however, in any country, when production begins a career of new activity. There is therefore a kind of periodicity in the amount of use of credit and of money respectively in effecting exchanges.

The view that credit exchanges must have a constant relation to the money supply rests upon the common statement that credit in the last analysis rests upon gold. This statement, of course, is correct, but needs interpretation. It is capable of two meanings. It may mean that every credit transaction rests directly upon a gold basis, and that against it there is directly maintained somewhere a gold reserve. It may mean that credit transactions are built on other credit transactions, a gold reserve being maintained somewhere for the balance after cancellation. Now the point at which cancellation will take place and the volume of transactions which may be settled thereby before the balance of indebtedness is struck are very varying. Consequently, while it is correct to say that the whole series of credit transactions rests upon a gold reserve, the amount of reserve needed is what the balance of indebtedness after cancellation calls for. This amount will be larger or smaller according to the state of confidence. In other words, to say that credit rests upon gold may mean that against every credit transaction is immediately some reserve of

gold; or that some reserve of gold is maintained to settle the balance after a prolonged period of cancellation. The latter, in the opinion of the writer, is the correct view, and the conclusion follows that the volume of credit possible on a given money supply is elastic. If so a mere manipulation of the money supply could be offset by changes in the volume of credit.

There are several other difficulties in the plan which, without doubt, Professor Fisher has foreseen. No remedy is adequate which does not provide for falling as well as for rising prices. The seigniorage retained would furnish a fund which, as long as it lasted, would take care of the needs of coinage during a period of falling prices. After that, as Professor Fisher truly remarks, we would be in no worse condition than we now are. Still we would be in as bad a condition. That is, we would be without a remedy. The practicability of the plan, even if it is advisable to maintain a price average, is of course remote. All this, however, does not detract from the praise that, in the writer's judgment, Professor Fisher deserves, not only for his eminently valuable contributions to monetary theory, but also for devising so ingenious a scheme. It is workable under certain conditions, and within limits might do considerable good. But the writer at least cannot regard it as an adequate or scientific remedy for the situation. Statistical inquiry may in time enable us to find one. Certainly the work of Professor Fisher encourages us to hope that some results may be accomplished in the future, but the time is hardly yet.

Are we then to content ourselves with letting things alone? To the mind of the writer there is some hope of preventing the hardship due to rising prices by action in other directions than in the manipulation of the money supply. The whole conservation movement, looking towards increased production and lower costs, is one movement in the right direction. The regulation of "combinations" of whose evil results we have too much, is another, as is also reduction in the expense of distribution of products. The establishment of a somewhat definite standard of living as the American standard, so to speak, which must be met by wages established through minimum wage boards is another means of avoiding the hardship of the rising cost of living. Efforts of labor unions, boards of arbitration and other agencies to lift wages are more continuous and likely to be productive of quicker results than can be brought about by an occasional or periodic

manipulation of the money supply to offset forces that are continuous in their operation; for they aim at the important element in the situation, namely, the immediate diffusion among different economic classes of the increased supply of money.

Other measures looking in the same direction are insistence upon the maintenance of adequate bank reserves, and the regulation of banking credits. If we should insist upon the maintenance of a considerably larger gold reserve in proportion to the volume of credit granted by banking institutions, the volume of exchange medium would be curtailed and would be under better regulation.

What we need is a scheme of anticipatory action, whereas all proposals thus far are to cure ills that have been suffered. Forces have already largely adjusted themselves to the changes before the remedy is applied. To try to cure the evil now is to undo the adjustment. Or else the attempt to cure the hardship will be foreseen and discounted, so that the adjustment again will do more harm than good.

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THE COMMERCE COURT QUESTION

The question whether the Commerce Court shall be retained as a part of our federal machinery for regulating railways was left unsettled by Congress at its last session. Provisions for abolishing it and transferring its duties to the various United States district courts were passed as a "rider" to the Legislative, Judicial and Executive Appropriation bill. President Taft vetoed the bill in this form. As finally enacted it provided funds for the maintenance of the court, but only until March 4, 1913. Doubtless, in determining whether funds shall be provided for it beyond that date Congress will settle whether it is to be retained as a part of our judicial machinery.

The question presented is important. But it has not heretofore been discussed and dealt with on its merits. A provision for the creation of a similar body was a part of the Esch-Townsend bill, the precursor of the Hepburn act, and this passed the House with the approval and backing of President Roosevelt in 1905. But when President Taft recommended the creation of a "United States Court of Commerce" in a message on January 7, 1910, the plan aroused much opposition in Congress. It was vigorously attacked by its foes, and but lukewarmly defended by its friends, in that body. Its adoption was almost entirely due to the persevering support of the President and his administration.

The court began business on February 8, 1911, under unusual conditions. Not only did the Commerce Court come into existence while the courts in general were under fire, but it was peculiarly under suspicion from the start, because it had been frequently predicted that the railways would soon "own" it. The Mann-Elkins act, by which the court was created, made extensive changes in the Act to Regulate Commerce. The court had to construe these provisions *de novo*, deciding not only the rights of parties, but also the extent of its own jurisdiction and of the new powers of the commission. No matter what its decisions were, they were sure to cause dissatisfaction to many persons. President Taft's administration and the Senate of the Sixty-second Congress were of one political complexion; the House of Representatives of another. There were also in both houses "insurgent" or "progressive" Republican members, who were no less hostile to the administration than the Democratic majority in the House. Mr. Taft was up for re-election. His administration was responsible for the Commerce

Court's creation. If, therefore, the court rendered unpopular decisions it was pretty apt to be made a target by the administration's critics.

In its earlier decisions, the Commerce Court put its foot into the trap conditions had laid for it. It overruled the Interstate Commerce Commission repeatedly, and decided repeatedly in favor of the railroads. Thus it speedily became a target for bitter criticism. It received a heavy onslaught from the commission in the latter's annual report for 1911:

Out of 27 cases passed on by the Commerce Court, preliminary restraining orders or final decrees have been issued in favor of the railroads in all but seven cases, and of these only three are of any magnitude. In saying that the court has ruled in favor of the railroads we do not mean that the ruling has been always adverse to the Commission, but it has been adverse to the shippers' contention. . . . In but three cases of any consequence where the Commission and the shippers have been opposed to the railroads, have the orders of the Commission been sustained even temporarily by the refusal to grant a temporary restraining order.

A bill to abolish the court was introduced by Representative Simms of Tennessee when the court had been in existence barely a year. At this critical juncture charges of improper conduct were made against one of its members, Judge Archbald, which added fuel to the flames. The abolition bill was passed by the House early in May and by the Senate early in June.

The passage by large majorities of a bill to abolish a branch of the government would, under ordinary conditions, raise a strong presumption that it deserved to be abolished. But the conditions were not ordinary. Besides, the bill was vetoed by a president, who, while he obviously must have been biased in favor of the court because he had practically created it, was well equipped by experience and training to form a judgment as to the merits of its decisions. The fact that the court had been in existence only sixteen months when the bill to abolish it was passed, suggests the possibility that it was not given a fair chance to show whether it was or was not of real value. In view of the charges that the court had been partial to the railways, it is significant that the railways did nothing in defense of it, when it was being attacked in the winter of 1912, but that several prominent lawyers for shippers, including John B. Daish of the National Hay Association, Francis B. James of the Cincinnati Receivers and Shippers Association, and Luther W. Walter of Nelson Morris and Company, actively de-

fended it before committees of Congress, and even sought legislation increasing its jurisdiction; and that the National Industrial Traffic League, the largest and most influential organization of traffic representatives of shippers in the country, adopted resolutions opposing its abolition. On the other hand, there were many shippers, especially those in the western intermountain communities, who were incensed by the court's decision in the so-called "Pacific Coast rate cases," who favored its abolition. As a matter of history, I may add that I know that the railways deliberately refrained from taking any active part in the controversy because, first, they did not think anything their representatives might do would accomplish anything; and, second, because they felt that they had little or nothing, and perhaps less than nothing, to gain by the retention of the court.

Conditions have changed since the bill was passed. The Supreme Court has rendered some decisions interpreting more fully the Interstate Commerce law and outlining more distinctly the jurisdictions of the Commerce Court and the commission. The Commerce Court itself has rendered a number of additional decisions. It may be desirable, therefore, to consider the Commerce Court question *de novo* in the light of all the evidence at present available.

The main arguments advanced for the creation of the court were: (1) It would promote expedition in the hearing of cases under the Interstate Commerce law. (2) It would secure a needed uniformity of decision in these cases which was impossible when they were tried by numerous courts all over the country. (3) The court's members, by constantly dealing with the same subject-matter and the same questions, would acquire expert knowledge that would enable them to render more intelligent and equitable decisions than could judges who lacked such knowledge.¹ The argu-

¹ In his message to Congress on January 7, 1910, President Taft said:

"Of course, every carrier affected by an order of the commission has a constitutional right to appeal to a federal court to protect it from the enforcement of an order which it may show to be *prima facie* confiscatory or unjustly discriminatory in its effect; and as this application may be made to a court in any district of the United States, not only does delay result in the enforcement of the order, but great uncertainty is caused by contrariety of decision. The questions presented by these applications are too often technical in their character and require a knowledge of the business and the mastery of a great volume of conflicting evidence which is tedious to examine and troublesome to comprehend. It would not be proper to attempt to deprive any corporation of the right to the review by a court of any order or decree which, if undisturbed, would rob it of a reasonable return upon its investment or would subject it to burdens which would unjustly discriminate against

ments that have been made in favor of the court's continuance are similar to those made for its creation.

The principal arguments advanced for its abolition are as follows: (1) Its maintenance involves additional expense to the government. (2) The expedition with which cases have been heard by it has not been satisfactory; in some instances there have been long delays; and all needed expedition could be secured by appropriate legislation if its duties were transferred to the district courts. (3) The Supreme Court must finally pass on questions of law arising under the Interstate Commerce act, and after it has done so all needful uniformity could be secured in decisions of the district courts, because the district courts would have to follow the precedents of the Supreme Court. (4) It is not necessary for a court which reviews the decisions of the Interstate Commerce Commission to have expert knowledge of transportation matters. The courts in rate cases are restricted to statutory and constitutional questions. Expert knowledge is required to pass on questions of fact; and the commission is the final judge of the facts. (5) The Commerce Court has interfered with the work of the commission by overruling it regarding matters which are exclusively within the commission's jurisdiction. (6) It has also shown a tendency unduly to favor the railways.

Let us examine these opposing arguments. The additional expense is not large. It has been estimated that the cost of marshals, clerks, offices, etc., amounts to less than \$40,000 a year.² The five judges rank as circuit judges. The annual salary of a circuit judge is \$7,000 a year. Each of the Commerce Court judges gets \$1,500 a year extra during his service on it, since the sessions are held in Washington. This makes the total paid to the judges \$42,500 a year. The figures indicate that the total annual expense for the court is less than \$100,000. Nor can all of this be justly charged against the Commerce Court as additional expense; other courts would have to hear commerce cases if it did not. The law provides that when part of its judges are not needed for

it and in favor of other carriers similarly situated. What is, however, of supreme importance is that the decision of such questions shall be as speedy as the nature of the circumstances will admit, and that a uniformity of decision be secured so as to bring about an effective, systematic, and scientific enforcement of the commerce law, rather than conflicting decisions and uncertainty of final result."

² Letter of Henry S. Drinker, Jr., published in the *Philadelphia Public Ledger*, Aug. 13, 1912; also in the *Congressional Record*, Aug. 14, 1912, p 11805.

its work the Chief Justice of the Supreme Court may assign them for service elsewhere; and most of them at times have been so assigned. Judge Archbald has held court in New York, Judge Hunt in Montana, Judge Carland in St. Louis, Judge Mack in Chicago, etc. Also, the Erdman law provides that any member of the Commerce Court or the Interstate Commission may be designated to act with the federal Commissioner of Labor in mediating in railway labor disputes; and the President appointed presiding Judge Knapp to perform this duty for two years, a duty to which he has given a good deal of time. If the court should be abolished, the expenses of clerks, offices, etc., would be eliminated, and the extra money paid to its members, as such, would be saved. But their salaries as circuit judges would go on, because federal judges are appointed for life.

While there might be a very small saving to the government, there would be added expense to litigants, which would fall especially heavy on small shippers. The act establishing the Commerce Court provides that it "may direct the original record to be transmitted on appeal instead of a transcript thereof." This is practical when the reviewing court sits in the same city as the commission. It was not practical under the old system, and would not be practical if the functions of the Commerce Court were transferred to the district courts; and litigants would be put to additional expense for transcripts. Assuming that rate cases will be disposed of more expeditiously by a single court, a change to a system under which they were heard by numerous courts would further increase the expense to litigants; for the longer a case drags along the more it costs the parties. Uniformity in the decisions tends to reduce litigation and, therefore, expense. Finally, as the amounts of money involved in rate cases are so large, often running into millions, and as it is important from a strictly pecuniary view that they shall be decided right, the relatively very small amount it costs the government to maintain a special tribunal to hear them cannot be considered of much consequence, if the tribunal is performing, or can be made to perform its duties fairly and efficiently.

The second question to be considered is under what system cases may be expected to be disposed of most expeditiously. Whether appeals to the Supreme Court are made from the district courts or the Commerce Court will make little difference in the facility with which the Supreme Court will dispose of them after they reach it.

The real point, then, is under which system decisions will be arrived at more quickly in the lower courts. There are eighty-six district courts among which the present jurisdiction of the Commerce Court would be divided under a law similar to the bill passed at the last session of Congress.³ Under the old system this jurisdiction lay with the various circuit courts. The majority of the House Committee on Interstate and Foreign Commerce in its report favoring the abolition of the Commerce Court said: "The Commerce Court has nothing to do but try these cases and ought to be able to give them great expedition. In point of fact, this has not always been done." The bill reported provided that cases arising under the Interstate Commerce act should be heard by three judges in the district courts and given precedence over other matters. This practice would be similar to that prevailing before the creation of the Commerce Court. It was contended by the majority that if the expedition act was applied in good faith by the district courts, cases would be handled as rapidly as under the Commerce Court act.

Certainly, as the majority report said, it would be natural to think that cases of a particular nature would be disposed of faster by a court hearing only them, than by eighty-six courts possessing less familiarity with the technicalities of the subject-matter involved, and having to dispose of the most diverse litigation. Besides, the district courts already are required to expedite several classes of cases, as those arising under the Sherman anti-trust law, the Elkins act, and the navigation laws, contempts before referees in bankruptcy, habeas corpus proceedings, proceedings for interference with submarine cables, and interlocutory injunctions suspending state statutes. Under practice or court rules, preference must also be given to the hearing of ordinary interlocutory injunctions, criminal cases, cases arising for a second trial, cases brought by receivers, cases brought by the United States, and jury cases.⁴

Evidence presented to committees of Congress by Attorney General Wickersham showed that under the system prevailing before the Commerce Court was created the hearing of rate cases was less rapid than it has been since. Subsequent developments sustain the position of the Attorney General. Under the old plan from the time the Hepburn act went into effect until the Commerce

³ *H. Rep.* No. 472, 62 Cong., 2 Sess.

⁴ *Ibid.*, p. 18.

Court began business the circuit courts issued seven injunctions restraining the enforcement of orders of the Interstate Commission. The periods during which the cases were pending between their filing in the court of first instance and the allowance of appeals to the Supreme Court ranged from one month to two and one half years, and averaged nine and one half months. Up to November 11, 1912, the Commerce Court had granted—or dealt with—such injunctions in 8 cases, and the similar periods varied from three months to one and one half years, and averaged six months, including the time that 4 of these cases were pending in the circuit courts before transfer.

From the time when the Hepburn act went into effect until the Commerce Court began business there were carried through the circuit courts 17 cases involving the validity of orders of the commission. The time taken to dispose of them ranged from two months to three years, and averaged eighteen and one half months. There were also 2 cases which were unfinished and which had been pending two years, and two years and five months respectively. Most of the cases that have been before the Commerce Court were transferred from the circuit courts, and the time during which they had been in the circuit courts cannot be charged against the Commerce Court. The fact that within sixteen months after it began business the Commerce Court had finally disposed of 16 cases shows that it has been reaching decisions much more quickly than did the circuit courts under the old system.

It is contended, as we have seen, that the decisions of a single court which deals exclusively with a given general subject-matter and questions of a given character are pretty sure to be more uniform and expert than those of eighty-six courts that have to handle all kinds of litigation. But, as we have also seen, the reply is made that while it is true that an expert body is required to pass on the questions of fact involved in rate cases, the Interstate Commerce Commission is an expert body and is the sole judge of the facts. Furthermore, it is said, the Supreme Court will speedily so decide statutory and constitutional questions as to cause decisions of the district courts on law points to be sufficiently uniform and expert.

Assuming for the present that the courts can now consider only statutory and constitutional questions, it does not follow that the decisions of eighty-six courts on these points would be uni-

form, or that the lack of uniformity would be a negligible evil. A court decision is at once the interpretation of statutory and constitutional provisions and their application to the case at bar. Now, no two cases, any more than two human faces, are ever exactly alike; and consequently in almost every decision the courts have to elucidate some partly or wholly new legal point. The interpreting of constitutions and statutes would never end if no more changes in them were ever made. After a higher court has made its interpretation the lower courts must interpret the higher court's interpretation. A single lower court will put pretty uniform constructions on the law and on the decisions of the higher court, but eighty-six lower courts are certain to make diverse constructions; and then nobody can safely assume that any of them is right. One power no one disputes the court's having is that of determining whether orders of the Interstate Commerce Commission are confiscatory, and of issuing temporary or permanent injunctions to restrain their enforcement pending or after determination of this question. Under the old arrangement the circuit courts sometimes differed as to whether injunctions should be issued when confiscation was alleged, even when the facts involved were substantially similar. In consequence, in one circuit the reduction in rates that the commission had sought to make might go into effect and the shippers would get the benefit of it; while in an adjoining circuit, the rates in which were also covered by the commission's order, there might be no reduction and the shippers would be placed at a competitive disadvantage with the shippers in the circuit where the injunction had been granted.

Not only is the final interpretation never put on any constitutional or statutory provision, but constant changes are made in the laws themselves. The Act to Regulate Commerce has been repeatedly amended. It undoubtedly will be in the future. A single court would construe the new amendments uniformly, while eighty-six courts would render diverse opinions. However, it is easy to exaggerate the evil of having numerous courts passing on the same questions of law. Ordinarily when one court has passed on a particular law point others of equal rank will follow the precedent established; and after the highest court has ruled on the point the diversity of opinion among the lower courts, though it may not be negligible, is certain not to be serious.

The foregoing discussion is based on the assumption that the

courts have no power to review the commission's findings of fact, but are restricted to statutory and constitutional questions. That this is true is often asserted unqualifiedly. As a matter of fact, wide differences of opinion exist among lawyers as to the extent of the jurisdiction of the courts in reviewing orders of the commission. The views on this subject may be roughly summarized under three heads.

(1) It is contended by some that all the courts can do is to ascertain, first, whether the carrier against which an order of the commission is directed is subject to the Act to Regulate Commerce; whether the subject-matter of the order is interstate commerce over which the commission has jurisdiction; whether the commission has afforded the carrier full opportunity to be heard in the premises; whether the order has been served upon the carrier in accordance with the provisions of said act; and whether the commission has found unreasonable or otherwise unlawful the rate or regulation covered by its order.⁵ In other words, has the commission complied with the formal requirements of the statutes; and would the enforcement of the order deprive the carrier of a fair return on the fair value of its entire property; is it confiscatory, and, therefore, unconstitutional? The making of rates, it is said, is a legislative function "which cannot be reviewed by the court."⁶ A modification of this view is that the courts probably may also inquire whether the order of the commission is so clearly wrong as to be beyond its power to make it. "It is conceivable," Commissioner Prouty has said,⁷ "that a rate established by it might be so palpably unjust that the court might feel called upon to say that Congress never could have intended to invest that body with authority to make such an order."

(2) A second view is that the courts have not only the foregoing authority but also the statutory power and duty to inquire whether the rates condemned by the commission are palpably unreasonable or unjustly discriminatory, and whether those

⁵ See brief filed in the Commerce Court by P. J. Farrell, Solicitor for the Interstate Commerce Commission, on "The Extent and Character of the Jurisdiction of the Commerce Court over Cases Brought to Enjoin, Set Aside, Annul, or Suspend, in Whole or in Part, any Order of the Interstate Commerce Commission."

⁶ *Twenty-fifth Annual Report of the Interstate Commerce Commission*, p. 59.

⁷ "Court Review of the Orders of the Interstate Commerce Commission," by Charles A. Prouty, *Yale Law Journal*, March, 1909.

it proposes to substitute are reasonable and non-discriminatory. It is true, it is said, that the fixing of a rate for the future is a legislative act and that this legislative function has been delegated to the commission; but Congress, in delegating this function, has laid down rules according to which it must be exercised, and it is for the courts to see that those rules are complied with. Section 15 of the act provides that if the commission shall be of the opinion that any rate is "unjust, or unreasonable, or unjustly discriminatory, or unduly preferential or prejudicial, or otherwise in violation of any of the provisions of this Act," it may determine and prescribe what will be the just and reasonable maximum rate thereafter to be charged. Similar powers are delegated with reference to regulations and practices. "Thus," it is said, "the power conferred upon the Commission is restricted by the limitations (a) that the power cannot be exercised except when the existing rate is unlawful; and (b) that the rate prescribed by the commission shall itself be just and reasonable."⁸ These are the rules which Congress has laid down for the commission to follow. The courts should, it is conceded, give great weight to the views of the commission; but they should not hesitate to overrule it if they find that its order is clearly illegal.

(3) A third view is that the carrier has a constitutional right to a reasonable compensation for every service it renders. On this theory, even in the absence of any statutory provision to that effect, the carrier would have a right to demand that each rate fixed by the commission should be reasonable and to have the question whether it was so reviewed by the courts.⁹

Past decisions of the Supreme Court seem to indicate that it is likely finally to hold that the second view above outlined is the nearest correct. Its decision in *I. C. C. vs. Illinois Central* (215 U. S., 452) is cited, among many others, by those who contend for a very narrow court review. The Supreme Court in that case indicated that very great and almost conclusive weight

⁸ See brief filed in the Commerce Court by Walker D. Hines, Chairman of the Executive Committee and General Counsel of the Atchison, Topeka & Santa Fe Ry., on "The Extent and Character of the Jurisdiction of the Commerce Court over Cases Brought to Enjoin, Set Aside, Annul, or Suspend in Whole or in Part any Order of the Interstate Commerce Commission."

⁹ See brief on "The Jurisdiction of the Commerce Court Considered from the Standpoint of the Constitutional Right of a Carrier to Charge a Reasonable Compensation for Each Service," filed in the Commerce Court, by A. P. Thom, General Counsel of the Southern Railway.

must be given the commission's findings of fact, and upheld its order. It added, however, that the powers of the courts extended to the determination, not only of all relevant and pertinent questions of statutory power and of constitutional power and right, but also to the question "whether, even although the order be in form within the delegated power, nevertheless it must be treated as not embraced therein, because the exertion of authority which is questioned has been manifested in such an unreasonable manner as to cause it, in truth, to be within the elementary rule that the substance, and not the shadow, determine the validity of the exercise of the power."

In *I. C. C. vs. N. P. Ry. Co.* (216 U. S., 538) the Supreme Court set aside an order of the commission on the ground that it was not within the commission's statutory power to make it. The law authorizes the commission to prescribe a through route where no reasonable and satisfactory through route exists. In this case the Northern Pacific contended that a reasonable through route did exist. The commission ordered the establishment of another one. The question presented was a mixed one of law and fact. The Supreme Court said:

The existence of such a [reasonable and satisfactory] route may be inquired into by the courts. . . . No doubt in complex and delicate cases great weight, at least, should be attached to the opinion of the Commission, but in the present case, at least, there is no room for difference as to these facts, and the majority of the Commission plainly could not, and would not, have made the declaration in their order but for a view of the law upon which this court must pass.

In *I. C. C. vs. S. P. Co., et al.* (219 U. S., 433) confiscation was not involved, nor was it questioned that the commission had met the formal requirements of the statutes as to giving full hearing, making its order properly, etc. The commission had issued an order setting aside new rates on lumber from the Willamette Valley to San Francisco and points on San Francisco Bay and restoring practically the old rates; and the question on which the case turned was whether the commission had confined itself to determining if the rates of the railways were unreasonable and discriminatory and to fixing in place of them reasonable and non-discriminatory rates, or had sought, as the railways alleged, to exercise an extra-legal power to control their rate-making policy. The Supreme Court decided the commission had exceeded its statutory powers, as charged, and set aside its order. Portland, although situated similarly to other points in the Willamette

Valley, except that it had water competition, was not, by the commission's order, given rates similar to those accorded to other points. Commenting on this, the Supreme Court said:

We cannot, therefore, assume that the order was legal because it rests upon the power to correct an unreasonable rate and to substitute a reasonable rate, since to indulge in that assumption would at once beget the inevitable inference that the order was repugnant to the statute because of its discriminatory character.

The implication seems to be that for the commission to fix rates that are plainly unreasonable or discriminatory is illegal and that in such a case the courts will set its order aside. We have seen that Commissioner Prouty concedes that a rate established by the commission "might be so palpably unjust that a court would feel called upon to say that Congress never had intended to invest that body with authority to make such an order." The decisions of the Supreme Court cited seem to justify the conclusion that under the statute as it now stands the courts may not review the commission on pure questions of facts, but that they may inquire whether it has taken all the steps necessary to ascertain the facts, and whether it has correctly applied the law to the facts found; and that if they consider its order plainly unreasonable or in excess of its delegated power they will set it aside as a matter of law, even though enforcement of its order clearly would not be confiscatory of the carrier's property as a whole. If the courts do have power to review the reports of the commission, not only on pure questions of law, but also, to the extent indicated, on mixed questions of law and fact, the desirability of uniformity and expertness in their decisions is increased, and the argument for a single court to hear such cases originally is strengthened.

But expedition, uniformity, and expertness might be bought at too dear a price. And it is said that this is being done—that the Commerce Court has been interfering unduly with the work of the commission, and by its decisions has unduly favored the railways. If this be true, its attitude may be due either to its personnel or to inherent shortcomings of such a tribunal. If due to its personnel, the condition can soon be remedied by changing that personnel. For example, even if the recent impeachment proceedings against Judge Archbald had not been successful, the four years for which he was assigned to the court would have expired in 1915; and, while he would have continued to be a circuit court judge, it would not have been necessary for the Chief

Justice of the Supreme Court to reassign him to the Commerce Court. After 1914 no judge who has been on the Commerce Court can serve on it again until the expiration of one year after his last service. Therefore, its personnel will constantly change. This may not be one of its merits. In fact, I consider it a demerit simply because it tends to prevent the court from becoming a really expert body—a thing that cannot be said of the commission, whose members may repeatedly be reappointed. But this does largely dispose of any criticism of the court based on its personnel.

It is contended, however, that the jurisdiction of the court is such as necessarily to bias it against the commission. It hears only suits instituted for the setting aside, annulling, or suspending of the orders of the commission. After calling attention to this, the majority of the House Committee on Interstate and Foreign Commerce said, in its report favoring the court's abolition:¹⁰

Nearly all suits brought in that court are, and will continue to be, suits against the enforcement of the commission's orders. All these suits are in fact attacks upon the commission. In all these cases the commission stands as the real defendant. These suits may be many and the charges multitudinous, but all the while there will be but one material defendant. The Commerce Court, year in and year out, must for all time, if it be continued so long, hear a never ending volume of criticism and denunciation of the commission regarding the discharge¹¹ of its functions and duties. Practically every invocation of the jurisdiction of this court will be adverse to the commission. Is it possible for any five judges to remain unbiased under such conditions?

If the court became biased against the commission it would tend to overrule it. If it overruled the commission it would decide in favor of the railways. For the Supreme Court ruled in the Proctor and Gamble case that shippers cannot appeal from a decision of the commission; therefore, in the future all appeals will be made by the railways; and as the railways will appeal only cases which the commission has decided against them, if the Commerce Court reverses the commission, it will decide for the railways.

One cannot simply count up the decisions of the commission and the courts and conclude from the figures whether they are biased. There are millions of railway rates. The shippers in

¹⁰ H. Rep., No. 472, 62 Cong., 2 Sess.

their complaints attack only the relatively few that they regard as most vulnerable. Therefore, it need not surprise us, nor will it necessarily reflect on railway management or indicate bias on the part of the commission, if it be found that a large part of the commission's decisions are against the railways. Again, the commission renders many decisions. Only the railways can appeal from them. They appeal only from those they deem most prenable. If, therefore, many of the decisions of the courts reverse the commission, this raises no implication of bias against either the commission or the courts. The Commerce Court occupies the same relative position the circuit courts formerly did. Therefore, we probably can best reach a rational conclusion as to whether the Commerce Court is biased for or against the commission and is helping or interfering with its work more than the district courts would, or is manifesting a partiality for the railways on the one hand, or the shippers on the other, by comparing its decisions with those rendered by the circuit courts. Some data regarding the decisions of the Supreme Court will also yield light.

From 1887 until 1910, 58 of the commission's orders were reviewed by the circuit courts; 25 of the cases ended in the lower courts; the commission's orders were reversed in 19 of these and sustained in 6. Of the 33 cases which went to the Supreme Court the lower courts decided 21 against the commission and 12 in its favor; and the Supreme Court decided 24 of them against the commission and 9 in its favor. Therefore, prior to 1910, 69 per cent of the decisions of the lower courts, and 73 per cent of those of the Supreme Court were against the commission.¹¹ Confining ourselves to the period since the Hepburn act went into effect in 1906, we find that before the Commerce Court was created the circuit courts rendered final decisions reviewing the commission's reports in 17 cases, and upheld it in $7\frac{1}{2}$, or 44 per cent, and reversed it in $9\frac{1}{2}$, or 56 per cent. The Commerce Court up to November 13, 1912, had finally reviewed the commission in 16 cases, and had reversed it in $6\frac{1}{2}$, or 41 per cent of the total, and upheld it in $9\frac{1}{2}$, or 59 per cent of the total. The Supreme Court, from 1906 up to last March, had reviewed reports of the commission in 11 cases, and had reversed it in 5, or 45 per cent of the total, and upheld it in 6, or 55 per cent of the

¹¹ Letter of Henry S. Drinker, Jr., *Philadelphia Public Ledger*, August 13, 1912.

total.¹² In other words, the Commerce Court has reversed the commission in a smaller, and upheld it in a larger proportion of cases than either the circuit courts or the Supreme Court.

Before the creation of the Commerce Court only the railways could appeal from the commission's orders. Therefore, the percentage of cases in which the circuit courts reversed the commission before 1910 is also the percentage of cases in which they decided in favor of the railways. The Supreme Court has held that shippers cannot appeal from the commission to the Commerce Court; and the percentage of cases the Supreme Court has decided against the commission is also the percentage of cases it has decided for the railways. The Commerce Court, however, soon after it began business, held that shippers could appeal to it, and, therefore, in several of the cases in which it reversed the commission it decided in favor of the shippers. Out of the 14 cases in which steam railways were involved, in which it had rendered final decisions up to November 11, it had decided 6½, or 46 per cent, in favor of the railways and 7½, or 54 per cent, against them. Therefore, the Commerce Court has rendered final decisions in favor of the railways in a smaller proportion of cases than either the circuit courts or the Supreme Court. While the court has granted 6 temporary injunctions restraining enforcement of orders of the commission, it has also refused 12 such orders.

These figures are, of course, not conclusive. Percentages, when the figures on which they are based are small, may have little significance. The figures are given merely for what they are worth and because they are the only ones available. So far as they indicate anything they point to a different conclusion as to the general attitude of the Commerce Court from that suggested by the criticism of it in the commission's annual report for 1911. The difference is due to the fact that when the commission's report was prepared the Commerce Court had been in existence only ten months while the figures here given relate to its work during twenty-one months.

Not only did the circuit courts reverse the commission oftener in proportion than has the Commerce Court, but with one exception the cases in which they reversed it were equally important. The Pacific Coast rate cases in which the Commerce Court re-

¹² These statistics are based on data given in appendices to *House Report*, No. 472, etc., and in *Senate Document*, No. 789, etc.

versed the commission were, perhaps, in point both of money and principles involved the most important ever appealed from the commission to any court. Among the cases in which the circuit courts, acting under the Hepburn act, reversed the commission was that involving the power of the commission to reduce the charge for switching cars to the Chicago stockyards from \$2 to \$1 (*I. C. C. vs. A. B. Stickney, et al.*, 215 U. S. 98); that involving the legality of the commission's order regarding the distribution of cars on the Illinois Central (*I. C. C. vs. Illinois Central R. R. Co.*, 215 U. S. 452); that involving the commission's order requiring the Northern Pacific to establish a new through passenger route to the Northwest (*I. C. C. vs. N. P. Ry.*, 216 U. S. 538); the Missouri River Jobbers case (*C. R. I. & P. Ry. vs. I. C. C.*, 218 U. S. 88); the Peavey Grain Elevator case (*I. C. C. vs. F. H. Peavey & Co.*, 222 U. S. 42), and the Northwestern Lumber Rate case (*I. C. C. vs. U. P. R. R.*, 222 U. S. 541). The citations here given are to the reports of the Supreme Court in these cases. In some of them the Supreme Court overruled the circuit courts and upheld the commission. Every student of the subject will at once recognize each of them as being important.

The point may be raised that the Supreme Court has reversed the Commerce Court in several cases. Up to November 11, 1912, the Supreme Court had decided six cases on appeal from the Commerce Court, reversing its decisions in four and affirming them in two. In two¹³ of the four cases in which the Commerce Court was reversed it had held it could entertain appeals of shippers, and the Supreme Court overruled it on this jurisdictional point alone; and in a third¹⁴ of these cases the railways were not involved, the proceeding being to determine the legality of an order of the commission covering the statistical reports of water carriers. Two of the other cases decided by the Supreme Court on appeal from the Commerce Court involved the question whether the latter had properly exercised its judicial discretion in issuing preliminary injunctions restraining the enforcement of orders which had been made by the commission, both of which were un-

¹³ *The Procter & Gamble Company, appellants, vs. United States; James J. Hooker, et al., appellants, vs. Martin A. Knapp, et al.; The Eagle White Lead Company, et al., appellants, vs. Interstate Commerce Commission, et al.* The last two cases mentioned were tried as one.

¹⁴ *Interstate Commerce Commission and United States, appellants, vs. Goodrich Transportation Company, et al.*

favorable to the railways. In one of these cases,¹⁵ as we have seen, the Supreme Court upheld the Commerce Court; and in the other¹⁶ reversed it. In the second case¹⁷ in which the Supreme Court upheld the Commerce Court the latter had held illegal an order of the Interstate Commerce Commission requiring interchange of traffic between two steam roads and an electric road. Therefore, in cases where the Commerce Court has ruled in favor of steam railways the Supreme Court has upheld it twice and overruled it once.

We will get further light on the attitude of the Commerce Court if we consider the reasons given by it for reversing the commission in some important cases which have not yet been passed on by the Supreme Court. One of its decisions which the commission criticised was that in *A. T. & S. F. Ry. Co., et al. vs. I. C. C., et al.* This involved an order of the commission prohibiting the railways from making an extra charge for switching cars from their main lines to industries located on spur tracks in Los Angeles. The court held that this service was different from that of switching to the railway's own depots and team tracks, and that the railway had a right to make additional charge for it. The court said:

In cases where there is a substantial conflict in the evidence or testimony on which the finding of the Commission is based we would feel bound by the finding unless clearly and palpably against the weight of the testimony; but we do not think that this Court is concluded by the finding of the Commission based upon admitted facts, which in no wise tend to substantiate the conclusion reached. . . . Where the facts are undisputed there is no occasion for facts to be found and the ultimate conclusion of the Commission is of mixed law and fact, which certainly ought not to be held to be conclusive upon this Court.

L. & N. R. R. vs. I. C. C., et al. involved an order of the commission reducing certain rates from New Orleans to Montgomery, Selma, Mobile, and Pensacola. The court said it had read and re-read the evidence with the utmost care, and added:

It is because of our inability to understand how on the facts which there appear the report before us could have been made that the difficulty under which we labor arises. . . . If the conditions dealt with in the report of the Commission are substantially as they are there described, we should have little hesitation in dismissing the petition. For even though in that case it might seem doubtful to us

¹⁵ *I. C. C. & U. S., appellants, vs. B. & O. R. R. Co.*

¹⁶ *U. S. & I. C. C., appellants, vs. B. & O. R. R. Co., et al.*

¹⁷ *B. & O. S. W. R. R. and N. & W. R. R. vs. U. S.*

whether the Commission had reached a just conclusion, it would, nevertheless, appear that there was room for differences of opinion, because different inferences were able to be drawn, and in such cases the conclusions of the Commission should be accepted as to matters thus clearly within its jurisdiction. . . . Not only is the Commission vested with a discretion which cannot be disturbed, and which we intend unqualifiedly to respect, but it is entitled to select the testimony which it will believe and rely upon according as it addresses itself to the discriminating judgment of the Commission. But it is not within the authority of the Commission to reduce the rates in this or any other case, not merely against the weight of the evidence produced to sustain them, but without anything substantial to warrant the conclusion reached or the reasons assigned therefor, and this, we are convinced, is a case of that character.

A. T. & S. F. Ry. Co., et al. vs. I. C. C., et al. was a case involving an order of the commission fixing the rate on lemons from California to eastern destinations. The rate had been \$1 per 100 pounds. Congress imposed an import duty of 50 cents per 100 pounds on lemons. The railways subsequently advanced the rate to \$1.15. The commission ordered it restored to \$1. The case turned on the question whether the commission had sought to exercise its rate-making authority to protect American lemons from foreign competition. The court decided it had, and that, therefore, its order was unlawful. It said:

The authority granted it [the Commission] under section 15 of the Act to Regulate Commerce to prescribe reasonable rates when it shall be of the opinion that the rates fixed by the carrier are unreasonable does not confer absolute or arbitrary power to act on any considerations which the Commission may deem best for the public, the shipper, and the carrier. Its order must be based on transportation considerations.

The so-called Pacific Coast rate cases¹⁸ involved orders made by the commission under the fourth (long-and-short-haul) section, as amended by the Mann-Elkins Act of 1910. This section prohibits a carrier from charging a higher rate for a shorter than for a longer haul; provided, however, that the commission may make exceptions to this rule and prescribe the extent to which the carrier may be relieved from its operation. It was conceded by the commission that the delegation of legislative power in the fourth section was unconstitutional unless Congress elsewhere in the act had laid down the rule according to which the commission should administer the fourth section; and it decided that Congress had

¹⁸*A. T. & S. F. Ry. Co., et al. vs. U. S.; U. P. R. R. Co., et al. vs. U. S.; I. C. C., City of Spokane, et al., interveners.*

laid down the rule in sections 1 and 3, which provide that all rates shall be reasonable and not unfairly discriminatory. The commission recognized the controlling force of water competition on the Pacific coast, and that this competition might compel the railways to accept rates to the coast which were unreasonably low *per se*. But it found the rates charged from eastern points to Spokane and other intermountain points excessive and unfairly discriminatory as compared with those to the coast. Without prescribing the exact rates which the railways should charge to either the coast or the interior, it prohibited them from in future charging any higher rates from St. Paul and the Missouri River to the intermountain points than to the coast, and from charging from farther east to intermountain points rates which should be more than certain percentages higher than those to the coast. The railways contended that the commission's order exceeded its statutory power, and the Commerce Court so held. The court's position was that the law authorized the commission to fix specific reasonable and non-discriminatory rates, and, when the fourth section was involved, to determine the extent to which the carrier might be relieved from the operation of the long-and-short-haul provision. The commission had not fixed nor based its order on any specific rates at all. For example, it did not forbid the carriers to make a higher rate from the Missouri River to the intermountain points than their *then existing* rate to the coast, but it forbade them to make a higher rate to the intermountain points *than any rate that they might ever make* to the coast.

"In other words," said the Commerce Court, "if the carrier from St. Paul in order to meet new water competition from New York should reduce the St. Paul-Seattle rate to a point less than at present and less than a rate reasonable *per se*, but nevertheless somewhat remunerative, it would be compelled, under this order, to grant the same rate to the interior point, even though, under these circumstances, a reasonable rate to the interior point higher than the unreasonable low rate to the coast point forced upon the carrier by such market competition under penalty of losing the business would not be in violation of section 1 or of any other provision of the act. . . . In so far as the Commission attempts thus to determine the relation of the long and short haul rates, irrespective of absolute rates it goes beyond any authority that has been vested in it, for it is not in the power of the Commission to say that 100 per cent, 107 per cent, or any given percentage of an unknown less than reasonable and non-discriminatory rate from the same point of origin to an interior point."

The court's decision in the Pacific Coast switching case¹⁹ seems to follow closely the decision of the Supreme Court²⁰ in which the latter upheld a terminal charge of \$2 a car for delivering livestock to the Union Stock Yards in Chicago. Its decision in the Louisville and Nashville case seems to fall within the rule laid down by the Supreme Court in the Northern Pacific through-route case, that where there is no room for difference as to the facts the courts may set aside orders of the commission. Of course, the Supreme Court may hold that the court was mistaken, and that there was room for difference as to the facts. The decision in the lemon rate case seems to be patterned exactly after the decision of the Supreme Court in the Willamette Valley lumber case. The decision in the Pacific Coast rate cases involved the construction of the amended fourth section, the correct interpretation of which is so very doubtful that hardly any two lawyers, whether those of railways or those of shippers, agree regarding it.

The foregoing discussion has led to several definite conclusions regarding the points involved in the Commerce Court controversy. These are that as the law now stands: First, the cost of maintaining the Commerce Court is not a needless expense. Second, expedition in the hearing of rate cases is desirable, and has been increased under the Commerce Court act. Third, the present jurisdiction of the courts over questions of law and over mixed questions of law and fact involved in rate cases is such that expert knowledge on the part of the judges that decide them and uniformity in their decisions are highly desirable. Fourth, the Commerce Court has not manifested a greater tendency to interfere with the work of the commission than other federal courts have or probably would, but has upheld it in a larger proportion of cases than the circuit courts or the Supreme Court. Fifth, the court has not manifested a bias in favor of the railways, for it has decided a larger proportion of cases against them than either the circuit courts or the Supreme Court. Sixth, the Commerce Court, by holding that shippers might appeal from the commission to it, did assume a wider jurisdiction than the law gives it, but its decisions in the important cases in which it has overruled the commission have apparently followed closely precedents estab-

¹⁹ *A. T. & S. F. Ry. Co., et al. vs. I. C. C., et al.*

²⁰ *I. C. C. vs. Stickney*, 215 U. S., 105.

lished by the Supreme Court. The case for the court's abolition has not been established; not, at least, on the grounds assigned.

All these things may be true, and yet the present system of federal regulation may be defective because of faults in the statutes which created the Interstate Commerce Commission and the Commerce Court and under which they work. It may be that the law should make clear that the courts are not to review the commission on issues of fact at all. This unquestionably would reduce the importance of having a special court to review the commission's decisions. When Attorney General Wickersham testified before the House Committee during the hearings on the Commerce Court question he suggested that if Congress desired to limit review by the courts absolutely to questions of law it might do so by passing legislation (1) requiring the commission to state in each report its findings of fact and the reasons on which its order is based; (2) providing that all findings of fact and conclusions of policy appearing in its reports shall be final and conclusive; (3) specifically limiting review by the courts to questions of law arising on the commission's report. As we have seen, it is contended by some lawyers that the carrier has a constitutional right to a reasonable compensation for each service. On this theory the question of fact as to the reasonableness of each rate is really a constitutional question, and the power of the courts to pass on it cannot be restricted.

Assuming, however, that such legislation as Mr. Wickersham suggested would be valid, the question arises as to whether it would be expedient. If the Commerce Court has any power under the present law to review the commission's findings of fact, it is a power which, under the decisions of the Supreme Court, is very limited and should be exercised only when the court thinks the commission clearly wrong. Compared with the number of orders the commission issues, the number of appeals made from it is small. Conceding that it is the best equipped body to determine and prescribe reasonable rates, does it follow that it will never make mistakes which a reviewing body, although less expert, might detect, and which it might be desirable to have corrected? It will be recalled that the majority of the House Committee in its report favoring the abolition of the Commerce Court contended, for reasons which it set forth, that the Commerce Court could not remain impartial toward the commission. Does not the committee's reasoning regarding the attitude of the court

toward the commission apply with much more force to the attitude of the commission toward the railways? The commission is a nominal rather than a real party to proceedings before the court. The railways are real parties with a pecuniary interest to proceedings before the commission; and perhaps we might, with no injustice, paraphrase the language the committee used regarding the court, and say, "the commission year in and year out must for all time hear a never-ending volume of criticism and denunciation of the railways regarding their discharge of their functions and duties. Practically every invocation of the jurisdiction of the commission will be adverse to the railways. Is it possible for any seven commissioners to remain unbiased under such conditions?"

Besides its function of determining and prescribing reasonable rates, the commission has also to perform the executive duty of enforcing the laws against the railways. Judge Prouty, until recently chairman of the commission, in an address before the American Bar Association on August 26, 1907, said:

That commission under the present law is charged with two sets of duties requiring diverse qualifications for their discharge. It stands, first, as the representative of the government to see that these highways are in fact public. It is commanded to enforce the provisions of the act to regulate commerce. It must see that the rates are reasonable and just; that the practices and regulations of railways are not oppressive; that the penalties provided by the act are enforced. . . . Second, this commission is in essence a judicial tribunal which hears and decides complaints. The qualifications of such a body are the exact opposite of the other. . . . I very much doubt whether the same body can properly discharge both these functions. In the end it will either become remiss in its executive duties or will, in the zeal of those, become unfit for the dispassionate performance of its judicial functions. Whatever may have been true in the past, the time has come when the commission should be relieved of all its duties except the hearing and deciding of complaints.

The recommendation made in the last sentence quoted has never been adopted. The commission is still not only the judge of the railways in rate cases, but also an agency for detecting their offenses and for instituting prosecutions against them. It would not be surprising, therefore, if the commission were not wholly impartial toward the railways. That it means to be fair goes without saying; its members are able and honorable men. But it is well within the bounds of conservatism and sobriety to say that most railway officers, at least, do not think that the com-

mission is an entirely impartial body; and their opinion cannot be wholly ignored. In these circumstances it seems very questionable if it would be fair or expedient to make the commission the sole, final judge of the facts in rate cases without at the same time so amending the law as to remove the commission from every influence that may tend to impair its impartiality. In the speech already quoted Judge Prouty added:

It must be admitted, however, that the objection to combining in the same person the duties of a prosecutor and a trier is a wise one, which should seldom be contravened. While the orders of the commission were unimportant and subject to review in the courts, the union of these two functions may have been well enough. Plainly a different question would be presented were the jurisdiction of the commission extensive and its decision final. That practical situation has now arisen.

This "practical situation" would arise much more emphatically if the commission by express statutory enactment were constituted the sole judge of the facts in all rate cases, and its findings were made binding on the courts.

SAMUEL O. DUNN.

Chicago.

NOTE.—Since this article was put in type the Supreme Court of the United States has rendered an opinion in the case of *I. C. C. and U. S. appellants vs. L. & N. R. R. Co.*, in which the views expressed in the text as to the limitations on the power of the Interstate Commerce Commission are sustained. This decision seems to give the courts even more authority to review the reports of the commission than I had sought in this article to show they possessed. In this case counsel for the government insisted that when the commission, in the exercise of the authority given by the Hepburn act, made an order setting a rate aside, its finding was conclusive even if it was wholly without substantial evidence to support it, provided confiscation was not involved. Counsel for the government even contended that the commission could issue a valid order in a case based upon information in its possession, and not upon testimony introduced at the hearing. The Supreme Court repudiates this entire doctrine.

METHODS OF BUSINESS FORECASTING BASED ON FUNDAMENTAL STATISTICS

A business man succeeds or fails in proportion to his ability to forecast the future trend of the influences determining the relation of supply and demand in his business. Some of these influences are technical and concern his particular business without affecting other lines; others are of a general nature and affect all lines of business definitely and vitally.

Some men form their judgment of these fundamental business factors from reading newspapers and trade journals. Others arrive at their opinion of the trend of affairs by observing the changes in statistics of trade and finance. Still others, going further, have made graphic charts based upon statistics of fundamental conditions, and have attempted from these graphic pictures of the past history of business to deduce laws of trade in accordance with which the future of business may be foretold. It is our purpose here to discuss the different methods of forecasting which have been based upon these various mechanical illustrations of the trend of business conditions.

Of those students of economic conditions who have attempted to develop a method of forecasting business conditions I have selected four for discussion. Two of these, namely, Stanley Jevons, the English economist, and Samuel Benner, an Ohio farmer, published the results of their investigations about thirty years ago.¹ A third, Mr. Roger W. Babson, of Massachusetts, has published the results of his studies within the past three years. The fourth is the economist, Professor Irving Fisher, of Yale University, whose first forecast appeared in the June number of the *AMERICAN ECONOMIC REVIEW* for 1911.

According to the method used these business forecasters may be divided into two classes: first, those who construct a chart or diagram and let it do the forecasting; and, second, those who use the cartographical device merely as a basis to judge the trend of

¹The juxtaposition of the names Jevons and Benner may seem rather incongruous. In extenuation it may be said that Benner deserves to be given prominence as the pioneer in the work of systematically forecasting business conditions in this country. Furthermore, while his writings received little if any recognition among economists, he had for a time a considerable following among business men. His methods, although crude, are not without points of resemblance to some at present in use.

conditions and attempt in addition to diagnose the future outlook of such factors as crops and politics before making a forecast. Under the first method there is no need of considering anything but the chart, for whether we have good crops and settled politics or crop failure and political discontent, it is supposed to forecast prosperity or depression with the scientific precision with which we can predict that spring and summer will be followed by fall and winter. Under the second method, however, the chart or diagram is insufficient as a forecaster. Human judgment is an additional requirement.

Of the four students mentioned, three, Jevons, Benner, and Babson, forecast by the first method, that is, the charts do the forecasting for them. Professor Fisher's diagram, however, gives a picture of past conditions and shows the trend of affairs, but does not imply an inevitable tendency for the future.

As to which method is the better, "the proof of the pudding is in the eating." I will therefore take up the work of each student of the subject in order and show what he has attempted to do, the method used, and the success attained. Before making a practical test of each case, however, I would postulate that no method of forecasting business conditions can be efficient or benefit the commercial world which does not take account of the three fundamental factors of primary importance, namely, crops, politics, and the condition of banking credit.

The purpose of the investigations of Jevons was to show that commercial crises were periodic, being caused by periodic changes in the solar influences which determine weather conditions. As weather conditions determine the yield of the harvests, and since a failure of the crops always causes depression in business, all that was necessary to prove the periodicity of commercial crises, thought Jevons, was to demonstrate the periodicity of the weather conditions which cause deficient harvests. Believing that he had found something in meteorological theories to help him, he conducted a series of investigations based on the hypothesis that the periodicity of commercial crises was caused by periodic variations in the frequency of the sun-spots. Probably a reason for making this supposition was that contemporary astronomers had concluded that the duration of a sun-spot period was about ten or eleven years, which corresponded strikingly with the interval between commercial crises in England.

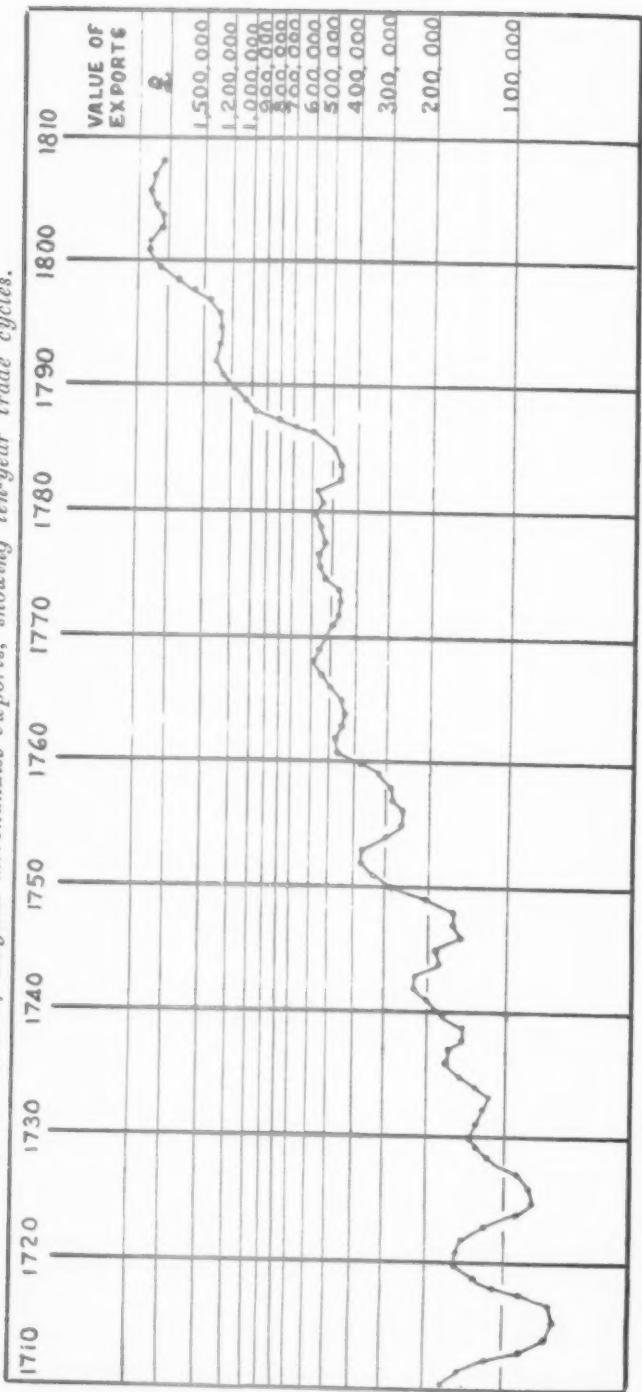
In support of his hypothesis Jevons in 1878 published

graphic charts of the statistics of exports from Great Britain to India and several American states, the most interesting of which was a diagram (see Chart A) showing a rhythmic fluctuation in the amount of English goods exported to India covering a period of one hundred and seventy years, and which showed a low ebb in foreign trade on an average of once in ten years. These cycles in exports were due to the periodic variations in tropical harvests, for when the harvests failed, the famine-stricken ryot of India could not buy the textiles of Lancashire. The result of the consequent falling off in exports was a commercial crisis in England, entailing numerous bankruptcies, and followed by a period of depression, which continued until the harvests of India again furnished a surplus which could be exchanged for English goods. These periodic variations in tropical harvests, Jevons professed to believe, corresponded with the solar periods.

But while these charts showed periodic effects, there is no conclusive evidence as to the cause, for the conclusions of the astronomers regarding sun-spot cycles have not yet approximated scientific laws, but are merely hypotheses, and therefore of no certain utility as a basis for predicting when we shall have crop failures. The chart of Jevons, moreover, showed that there were no distinctive periodic fluctuations in the exports to non-tropical countries, such as the New England states, so that the efforts of Jevons to deduce laws of trade from a chart which would serve as a mechanical forecaster of business conditions were not successful, and it may be added that further economic investigations seeking to correlate commercial conditions with solar influences must be deferred until astronomers can tell us more about the sun. It is a peculiar fact, however, that although nothing conclusive has ever been established regarding the periodicity of panics, many economists of scientific standing have clung to Jevons' hypothesis of ten-year cycles as if it were a law, although really it is nothing more than a superstition as unfounded as the notion that thirteen is an unlucky number.

But even if Jevons had been successful in establishing a law of periodicity in commercial crises, it would not serve as an adequate basis for forecasting business in the United States, because, as stated above, any efficient method of forecasting business must take account of crops, politics, and banking conditions; and Jevons considered only crops. It is hardly fair to criticise Jevons on this score, however, as he was interested merely in tracing the origin

CHART A.
Jevons' chart of English merchandise exports, showing ten-year trade cycles.



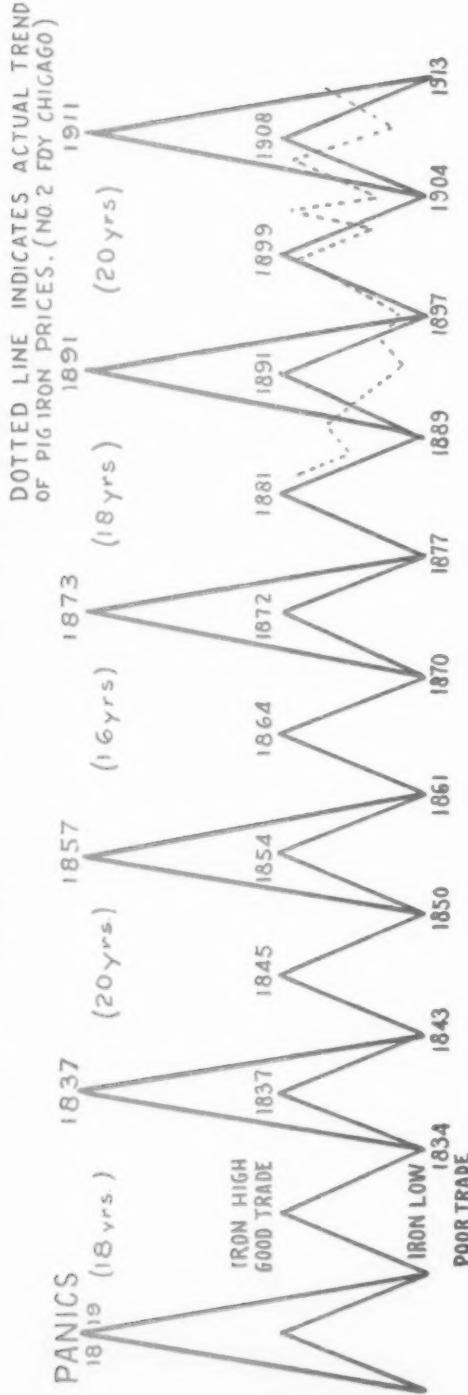
of commercial crises to planetary causes, and did not attempt to develop a system of forecasting business from year to year.

Benner, however, formulated an hypothesis from which he believed it possible to forecast panics and cycles of "ups and downs" in prices with certainty, and though confessing ignorance of the causes determining these cycles, he assumed that their periodic appearance could be expected "with as much certainty and astronomical exactness as the return of the eclipses of the sun and moon." His theory of price cycles was stated in his so-called "Cast Iron Rule," which was that "one extreme invariably follows another in all the operations of nature, in all the business affairs of man, and in all the ramifications of trade and industry." This rule when applied to the fluctuations of prices through a series of years he considered "as persistent as the attractive and repulsive forces of the magnet, and as unchangeable as the laws of the Medes and Persians."

In verification of this theory of price cycles Benner published several diagrams, the most important of which was a diagram of the ups and downs in pig iron prices (see Chart B), showing that from 1837 to 1888 pig iron cycles occurred at successive periods of eight, nine, and ten years, and also that in broad cycles of fifty-four years there were panics returning in successive periods of sixteen, eighteen, and twenty years. According to this diagram panics were to occur in 1891, 1911, 1918, etc., but as it turned out they occurred in 1893 and 1907. Pig iron cycles should have culminated in 1891, 1899, 1908, etc., but in all these years except one pig iron prices were very low, and several points have been reached in the course of pig iron prices which did not correspond to Mr. Benner's "Cast Iron Rule" as illustrated by his diagram. It is evident, therefore, that his attempt to produce a chart which would forecast business conditions was unsatisfactory, and his method unworkable.

I would say, however, that in attaching importance to price cycles Mr. Benner was on the right track, and his work is highly suggestive, but he did not seem to have a clear understanding of what are called fundamental conditions. Though a keen observer, he did not discern the causes which produced the conditions of alternating prosperity and depression. He believed a high tariff together with greenbacks and a free silver currency to be necessary to prosperity, and the converse the cause of depression, while we know that the fear of cheap money legislation

CHART B.
Bemer's cycles of pig iron prices, showing periodic ups and downs in business.

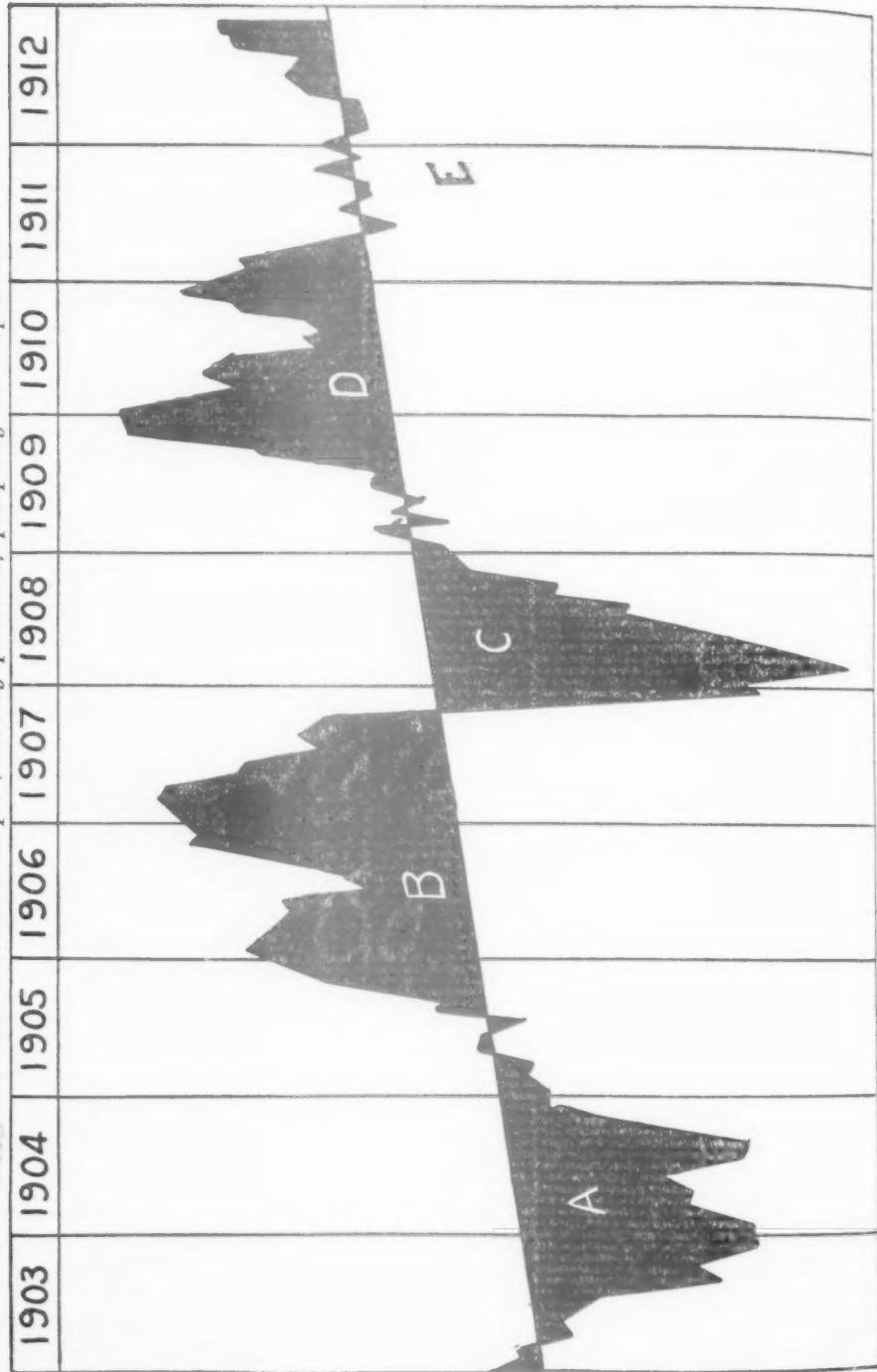


caused the panic of 1893, and a collapse of banking credit the panic of 1907. In spite of his crude notions about the influences determining business conditions, however, Mr. Benner's *Book of Prophecies*, published in 1875 and in later revised editions, did much toward the advancement of the study of fundamental conditions and deservedly attracted a great deal of attention among business men.

In the last edition of his *Prophecies*, published in 1900, Mr. Benner concluded his forecast with the remark that he had been in poor health for some time—"the spirit of prophecy had nearly departed"—and hoped that "some enthusiastic and ambitious person would take up the subject of Benner's *Book of Prophecies*, bring the tables and prices up to date, and extend the cycles into the far future." The number of forecasters now in the field bears witness that his prayer has been answered. In fact, the "Theory of Action and Reaction" which Mr. Babson professes as the basis of his method of forecasting business, is the same idea, in the terminology of physics, as Mr. Benner's "Cast Iron Rule" that "one extreme invariably follows another." Mr. Babson goes one step further than Mr. Benner, however, and says that "action and reaction are equal," considering not merely the intensity of each extreme but also the time of action. To illustrate this theory, he plots statistics of business and financial factors above and below a line which represents the normal growth of the country's business (see Chart C), and says that the area within the graph above the line must equal the area below the line, that is, the "areas of prosperity and depression must be equal."

Now, this theory of action and reaction is scientifically correct for past periods for which the normal growth can be calculated from statistical data, for the reason that the line of "normal growth" is itself really an average of past business conditions. It might also be true of the future if there were no change in the normal increase of the volume of business. There are two factors, however, which may prevent new "areas" from being formed as might be expected from the trend of past areas and line of normal growth. These factors are politics and crops. For politics may so depress business and thus intensify and prolong the area below the normal line of growth that it will much more than equal the preceding area of prosperity above the line. This situation would doubtless be found in the period of depression from 1892 to 1897, if the area formed during this period were constructed below the

Chart C.—Babson's area plot, showing periods of prosperity and depression.



line of growth for the ten years preceding. Similarly, crop failures may also continue a depressed area. But a good harvest or a succession of good crops may come just when the area of prosperity above the line is vanishing, and this would check the downward tendency of the area below the line so that it would not equal the preceding area above the line. In fact, according to the theory that action and reaction are equal, an area below the line should have developed during the latter part of 1911 and the year 1912, but as a matter of history this area has not materialized as the theory requires. This the author explains by saying that "owing to the increased study of fundamental conditions these areas should slowly decrease in size," the area now to be developed below the line being smaller than the preceding area above the line. This explanation, of course, virtually rejects the theory that action and reaction must be equal, and intimates that like the swings of a pendulum, the areas above and below the line will grow smaller with each oscillation. And since we believe that the principle of equality of action and reaction is true, as applied to past conditions where it is mathematically possible to make allowances for abnormal crop and political tendencies, we are inclined to believe that the inherent defect in the area plot lies in the impossibility of accurately predetermining the line of normal growth. All students of the subject recognize the fact that this line changes from year to year and that it is therefore subject to revision, but this necessity of constant revision of the line of normal growth vitiates the worth of the area plot as a device intended to serve as a mechanical forecaster of business conditions, for obviously the newest area will not equal the area preceding until the plot is reconstructed. Therefore, instead of being a machine which will forecast conditions, it serves only as a picture of past conditions. As such, it can be used to some extent as a basis of judging the future, if separate cognizance is taken of the crop and political outlook at all times, but this use is extremely limited because during a period of prosperity there is nothing in the area plot which will tell when a panic or period of liquidation may be expected. For in order to forecast a reaction in business, it is necessary to have an accurate knowledge of the condition of banking credit, and although banking factors are included in the area plot, they are averaged in with the business factors so that their especial value as a business barometer is obscured.

Recapitulating, the theory of action and reaction is true of past conditions, but neither this theory nor the area plot will serve as a mechanical business forecaster complete in and of itself. And although the area plot, properly constructed, would have some value as a basis of judging the trend of affairs if the outlook for crops and politics be considered separately, still its use in forecasting is extremely limited, since it does not give us an accurate knowledge of banking conditions, the most important of all fundamentals in any method of forecasting.

In contrast with the three preceding students who have attempted to forecast business conditions by the use of charted statistics, the work of Professor Irving Fisher differs both as to method and factors used. It will be remembered that Jevons sought to correlate commercial crises with the fixed tendencies of solar influences, that Benner sought to show that panics were periodic, and that Babson, while forswearing temporal periodicity, professes to believe in periodicity in plotted areas. In each case the future had to conform to the past trend of the chart or diagram. The diagram illustrating Professor Fisher's "Equation of Exchange," however, is used, not as a mechanical forecaster in and of itself, but merely as a picture of past and present conditions. The future is not indicated, but must be judged from the general outlook, using the diagram as a guide. Not only in method, but also with regard to the factors used does Fisher differ from others, for while statistics of foreign trade were charted by Jevons, pig iron prices by Benner, and financial and trade statistics by Babson, Fisher depends mainly upon banking statistics.

In discussing his "Equation of Exchange," however, it must be said that he, like Jevons, was not primarily interested in developing a method of forecasting business, but devised his diagram to illustrate the quantity theory of money.²

In his "Equation" Fisher has with approximate accuracy discovered the velocity of circulation of money, the first time in history that this achievement has been accomplished. The feature which serves as a basis of forecasting, however, is the velocity of

² The Equation of Exchange is
$$M V + M' V' = P T.$$

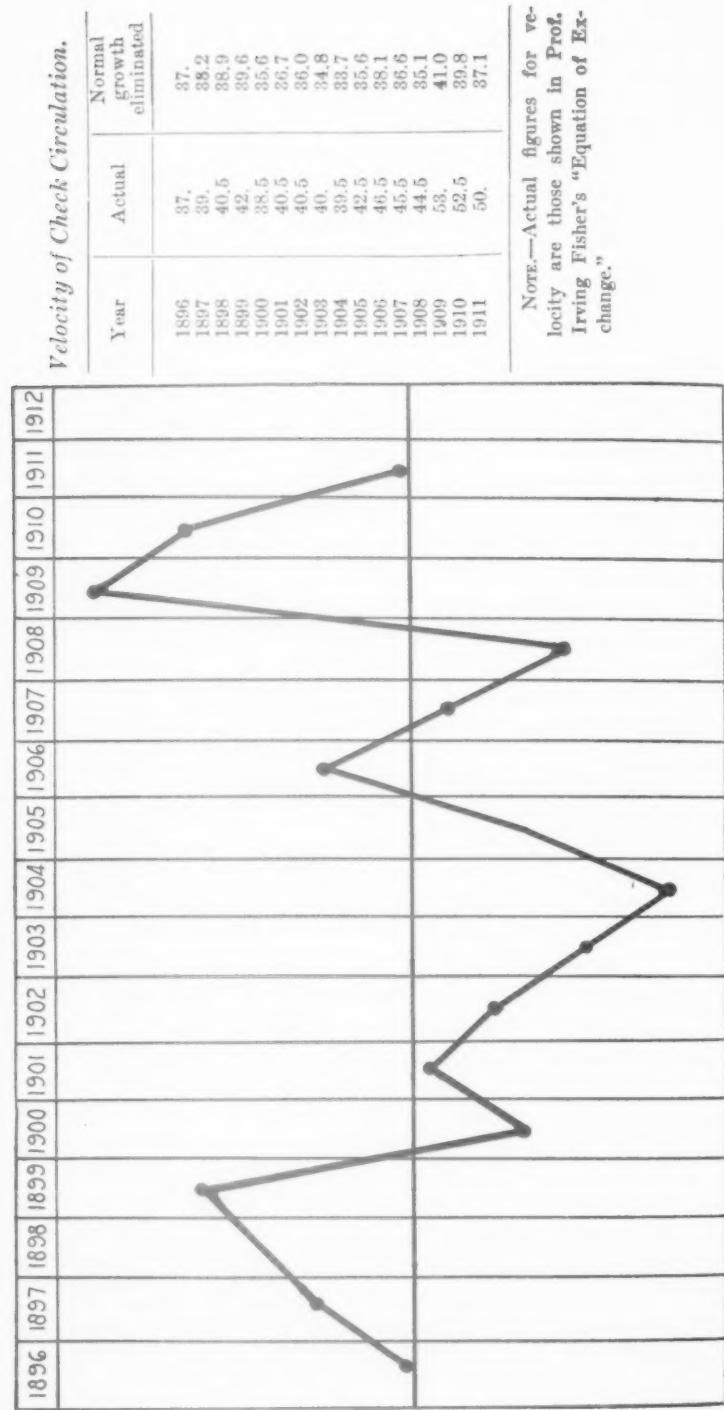
M and M' represent respectively the amount of money and checkable deposits in the country, V and V' respectively representing the velocity of circulation of money and checks. P stands for the price level and T for the volume of trade. (See *Purchasing Power of Money*, p. 48.)

check circulation, or the rate at which checks are passed from hand to hand. The French economist Des Essars says that the greatest velocity of checkable deposits is attained in the year the crisis arrives. Professor Fisher says his estimates for this country show the greatest velocity at least a year before the crisis, the maximum velocity having been reached in 1899, 1901, 1906, and 1909, in each case preceding the year in which prosperity culminated.

It seems to be pretty well established that the velocity of deposit currency increases during business improvement and decreases during industrial depression, so that theoretically it should prove a good barometer of business conditions. The chief impediment to its use as such heretofore has been the absence of accurate statistics. In fact, Fisher's figures for velocities between 1896 and 1909 are interpolations, there being no data in existence from which computations could be made. Moreover, a chart of Fisher's estimates of the velocity of check circulation, the normal growth having been eliminated, shows that there is no dependable tendency from which the degree of normality of conditions can be judged (see Chart D). It would appear, therefore, assuming that the activity of deposits is a good barometer, that the chief defect in the "Equation of Exchange," from the standpoint of business forecasting, lies in the fact that it has been necessary to base calculations of the velocities of deposit currency upon statistics which are admittedly far from accurate. Before the "Equation of Exchange" can become serviceable to the business world as an aid in forecasting the trend of conditions, it will be necessary that the statistical data be obtained more accurately, as well as more frequently, than the present yearly estimates.

From the foregoing it is evident that the attempts to produce a chart which would serve as a mechanical forecaster of business conditions have been unsuccessful, and rationally such a result should be expected, for the ups and downs in business do not return with the regularity of the changes of the seasons, and therefore cannot be forecasted years ahead of time, except conditionally. The role of the successful business forecaster must be analogous to that of the weather forecaster, who finds a dependable basis for his work in the planetary movements which determine the seasons of the year, but whose immediate forecasts of snow, rain, heat, and cold must be based upon conditions actually existing in other sections of the terrestrial atmosphere, and qual-

Chart D.—Fisher's estimates of the velocity of circulation of bank checks.
(Normal Growth (2%) eliminated.)



ified with regard to the direction of the wind. If there is a sudden shifting of the wind, the forecast must accordingly be modified. Similarly, the business forecaster can predicate his forecasts upon the general trend of fundamental conditions, but his forecasts, like those of the weather man, must be based on conditions actually existing, particularly in the money market, and conditioned as to the future political and crop outlook. With any change in the political, crop, or international money outlook, the forecast must be modified accordingly.

As a guide to judging future business conditions according to the above method, I have constructed a "Composite Chart of Fundamentals" (see Chart E). This chart comprises a business graph, a banking graph, and a graph to show the trend of thirty-two leading stocks.

In constructing these graphs each factor included has been tested separately and only those have been chosen which are good barometers in themselves. The business graph reflects an average of the monthly statistics of bank clearings, railroad earnings, pig iron production and prices, commodity prices, imports, building, and immigration. The factors used in the banking graph are reserves, deposits, the rate of commercial paper, the percentage of loans to deposits, and the percentage of reserves to loans.

It is absolutely necessary to obtain barometer figures for each factor separately before combining all factors, because some factors manifest a seasonal variation which must be eliminated, while others show a normal growth which must be reduced to a normal after determining upon a base year. Thus, bank clearings, railroad earnings, and pig iron production vary from month to month and show an increasing tendency over a period of years; money rates show a seasonal variation but no normal growth to speak of; while pig iron prices are a very good single barometer without eliminating either seasonal variation or normal growth. The great advantage of treating each factor separately is easily evident, for a sudden change in the growth of any one will make little difference when averaged with the rest, while in Mr. Babson's "Area Plot," the location of the whole area is changed by changing the single line of normal growth.

In the preliminary work of developing the "Composite Chart of Fundamentals" several factors other than those above mentioned were tentatively included and then rejected, such as the statistics for idle cars and for copper production and prices. But in case

of idle cars the number is such a small proportion of the total number of cars in the country that the statistics of idle cars alone show fluctuations too violent to be used as a dependable barometer. On the other hand, copper prices are a sensitive and reliable barometer of industrial conditions, but the fact that one half the copper produced in this country is exported makes it inadvisable to include copper statistics in the business graph, for during a period of dull business in this country a spurt in the foreign demand for copper may cause a rise to prosperity prices. This is what happened during the first half of 1912.

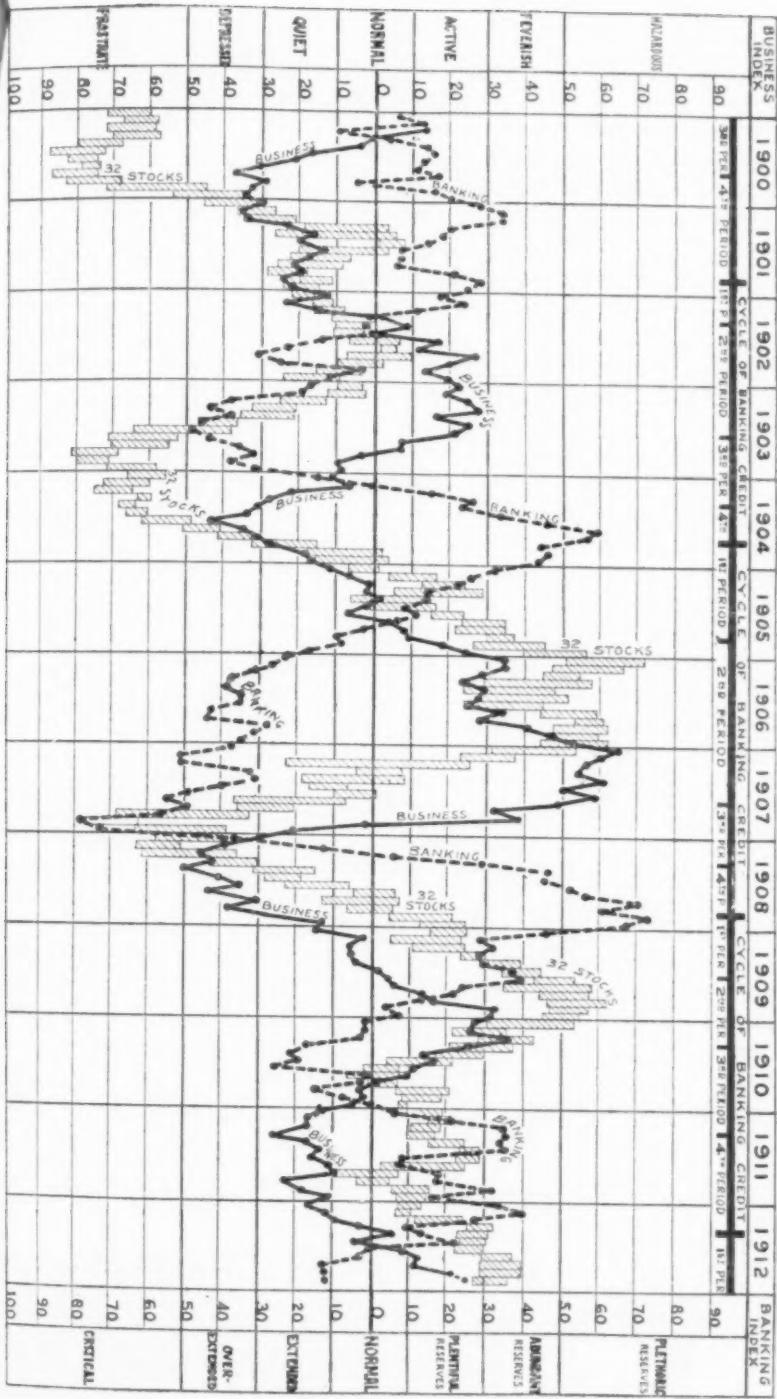
By dividing the composite chart into periods or cycles, which are well defined, its utility as a basis of forecasting is enhanced, and since the crisis which marks the culmination of each cycle is generally caused by the collapse of our credit system, these periodic divisions of the chart may be called "Cycles of Banking Credit." These cycles usually last about four years, due to the fact that business generally halts until the result of the presidential election can be ascertained, and after expanding for two or three years suffers a reaction because banking credit becomes over-extended and collapses, owing to vital but remediable defects in our banking system, chief of which is the lack of a central bank to control the minimum discount rate of the country, for, as Professor Irving Fisher, in his *Purchasing Power of Money*, has so strongly enunciated, "the incubation period of a crisis is largely due to the sluggishness with which the rate of interest adjusts itself to changes in prices, coupled with the fact that this inadequacy in the adjustment of the rate of interest itself stimulates and aggravates the rise in prices." After business has thus been checked, a new period of expansion is generally deferred until after the next presidential election. It is evident that the duration of these cycles is not a constant quantity, as would be a cycle determined by astronomical causes, for a thorough reform of our banking system and a change in the length of the presidential term would doubtless lengthen the credit period and bring about a notable change in the effect of political influences upon business.

During each credit cycle business conditions pass through four stages or periods as follows: (1) Improvement; (2) Prosperity; (3) Liquidation; (4) Readjustment.

In order to have a period of business improvement three favorable fundamental conditions are required, namely, good crops, satisfactory politics, and easy money conditions. A rise in the

CHART E.

Brookmire's composite chart of business, banking, and investment conditions, showing cycles of banking credit.



stock market for three or four months always precedes and forecasts business improvement. The business man will find the stock market a reliable barometer, because its movements at all times reflect the best judgment of the world's most far-sighted financiers regarding the business outlook. Accordingly, when a rise in the level of security prices foretells improvement, the merchant or manufacturer may plan to push his sales and increase his stock of goods with confidence, for a period of improvement is accompanied by rising prices of nearly all goods, and the earlier preparation is made, the greater will be the profits. The question naturally suggests itself, however, When is the business man to be warned of the culmination of the period of prosperity which follows the period of improvement? The answer is that the banking graph is a very reliable barometer, for during the period of prosperity the banking graph falls, indicating that the resources of the banks are being drained off into the avenues of commerce. When the banking graph indicates that the reserves are as low as the law allows, the banks call the loans of such of their customers as have borrowed money on call to buy securities, thus forcing security liquidation. The money which the banks thus obtain is loaned to merchants and manufacturers. But during the forced sale of securities which attends this transfer of funds from stock exchange borrowers to the commercial demand, security prices are lowered ruinously, and the stock market graph rapidly falls, and here again the business man will find his best friend in the stock market graph. For when the banks have reached the limit of security selling, and can no longer obtain money in this direction, there is no alternative but to refuse to renew the loans of commercial borrowers. The result is that merchants sell their goods at sacrifice prices to pay up at the banks, and there is general liquidation throughout the entire business world. As indicated above, however, this situation is always forecasted by the fall in the banking and stock market graphs, the stock market especially being an invaluable barometer to the business man in warning him of a period of declining prices and business reaction. Following the period of liquidation comes the period of readjustment, and the cycle is complete when a rise in the stock market portends the period of improvement of a new cycle.

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St. Louis.

THE TARIFF BOARD AND WOOL LEGISLATION¹

During the second session of the Sixty-second Congress no less than six different bills were offered in the Senate and House as revisions of the tariff schedule levying duties on wool and manufactures of wool. All of these bills, although differing widely from each other, were claimed by their framers to be based upon, or at least not at variance with, the findings of the Tariff Board in its report on Schedule K. Even the Democrats in their long attack on this report said in conclusion: "So far as conclusions can be drawn from the Board's report, it furnishes nothing to justify any change in the rates proposed in H. R. 11019."² Democrats, Progressives, and Republicans alike justified the rates in their respective bills by the facts and figures of the Tariff Board's report. Naturally, all this was quite confusing to the average citizen and he asked repeatedly: "Why did not the Tariff Board recommend rates to Congress? And if it had undertaken this task, what rates would it have recommended?"

In answer to these questions, in the first place, it should be said that the Tariff Board was never intended to be a rate-making body. Its friends aspired to make it a substitute, not for Congress in its legislative capacity, but for the Ways and Means Committee and the Finance Committee in their capacity of collectors of tariff information. Under the Federal Constitution it is practically certain that Congress could not delegate legislative power to a board, but it can give power to investigate and report findings of facts. In the second place, these questions suggest a belief, common enough in these days, that there are certain rates which once suggested would be accepted by all as obviously correct. To state this proposition is to answer it, for it must be

¹Neither the Tariff Board nor any member of it assumes any responsibility for the use made of the Board's statistics in this article or for any observations made about them. I take full and complete responsibility for the construction of the tables and for all the statements made and opinions expressed.—*W. S. C.*

²*H. Rep. 455, 62 Cong., 2 Sess.*, p. 66. H. R. 11019 is the bill passed by the Democrats of the House during the first session of the 62d Congress which was prior to the publication of the Tariff Board's report. H. R. 22195 was identically the same bill introduced after the Tariff Board's report was published. Both of these bills, after being modified in conference with the Senate Progressives, were passed by both branches of Congress and vetoed by the President.

clear to anyone acquainted with American tariff controversies that the abuse hurled at the Tariff Board last winter would be as nothing compared with the abuse such action would arouse. The fact of the matter is the Tariff Board never intended to go beyond reporting facts and it persistently refused, under urgent political demands, to give even an opinion of what rates it considered equitable and just. No one realized the difficulties of the problem as well as the members of the board themselves and they declined to allow the zeal of those who saw the limitations of a tariff board less clearly than they, to defeat its real usefulness. Tariff making is fundamentally a question of theory rather than a question of statistics. There is no set of rates which are obviously and absolutely equitable and just, for the question which must always be answered first is: "Equitable and just on what political and economic theory?" Rates equitable and just from the standpoint of revenue might be very inequitable and unjust from the standpoint of protection. In like manner, rates equitable and just from the point of view of national exclusiveness might be very inequitable and unjust from the point of view of active foreign competition. It will be profitable to examine further the political and economic difficulties in the way of delegating the power of making or recommending rates to a tariff board or commission.

No board could suggest rates until it assumed the tariff policy of some political party to be desirable. Obviously it is not within the province of pure reason to decide which is preferable—a tariff for revenue only or a protective tariff. Complete statistics and facts might be gathered on all the schedules of the tariff act and still this question would be no nearer solution. Its answer is found in the political sentiments of the electorate and as long as the voters are the ultimate source of power in the United States the answer must come from them. If the voters through their representatives in Congress were unanimously in favor of a given tariff policy this obstacle to delegating rate-making power to a board would be removed for the time being; but it often happens, as it did in the Sixty-second Congress, that different tariff theories prevail in the majorities of the two branches of Congress. In such a case no board could remain non-partisan that did not attempt to recommend rates based on both tariff theories. It is not likely that the two or three great political parties will very soon agree upon a common tariff program, and, until they do, no commission can take the tariff out of politics.

In the past, the political premises on which Congress has prepared tariff acts have been determined at the polls and it seems hardly probable that the people will ever relinquish this right. The Tariff Board as it was constituted of course had no power even to recommend rates, but this discussion should make it clear that if it had undertaken this task it would have been forced to premise its conclusions with some political theory of tariff making.

The political difficulty which stood in the way of the Tariff Board's recommending rates having been outlined, there is the economic difficulty to be noticed. If the board had assumed for the purpose of making a set of rates that a given political tariff theory were desirable, it would have been face to face with the question of efficiency. In the Tariff Board's report on Schedule K there is a vast amount of information relating to efficiency and economic conditions which no tariff maker can disregard; but the use of it removes the task of rate making from the field of mathematics to that of personal judgment. Rate making becomes, then, no longer the work of a statistician, but the work of those with authority to say what the policy of the country is to be regarding a particular industry. An example may make this point clear.

The wool-growing industry in the United States presents to the legislator a very complex problem—the problem of what parts of the industry should be preserved and what parts, if any, should be eliminated by foreign competition. Three distinct divisions of the wool-growing industry exist in the United States: (1) the fine-wooled merino sheep, chiefly in Ohio and the neighboring states, which cannot exist unless at least the present tariff rates are maintained; (2) the crossbred flocks which would exist even under free wool; and (3) the flocks of the ranch states of the far west, the amount of protection required for them being a matter of debate. These facts present a problem of what is economically desirable, and the conclusions reached by study of them will depend primarily upon the student's economic assumptions.

Those with a leaning toward free trade, who approach and study the part of the Tariff Board report treating of wool growing, can with ease construct an argument in favor of free wool. This conclusion is reached by studying the efficiency of wool growing in the United States as compared with that in Australia and England. Cost figures are not ignored; they are accepted as the cost of producing wool in the United States under the existing

conditions. Such students advocate changing these conditions and thereby reducing the costs.

In pursuing their argument they consider, in the first place, the sheep in the eastern states. They claim that the high cost of production of fine merino wool, as shown by the Tariff Board, proves, not that high protection is needed, but that it is economically unprofitable to maintain in the United States the fine-wooled merino sheep; that the crossbred flocks, which produce wool at a negligible cost, are peculiarly adapted to the farming conditions of our eastern states; and that if the tariff on wool were removed, the owners of the fine-wooled flocks would be forced to cross their ewes with the mutton breeds and by this means the wool-growing industry of the East would gradually become a profitable supplement to general farming, as it is in Great Britain, and not a highly specialized industry, as it is today in parts of Ohio and Michigan.

Continuing their argument these advocates of free wool turn to the great flocks of our western ranges and they contrast the breeding, pasturing, and management of the flock-masters of Australia, New Zealand, and Argentina with the conditions in our West. They claim that if the methods of the former were adopted in this country the costs of producing wool would be reduced so that our flock-masters could compete successfully with all the world without the tariff. They admit that free wool would force a readjustment in the West as well as in the East, but they say it would place the industry on a much sounder economic foundation.

On the contrary, the advocates of high protection can argue from the part of the Tariff Board's report treating of wool growing that the rate on merino wool should be even higher than eleven cents per pound. It is said that very fine merino wools are becoming more and more scarce each year with the inroads which the mutton sheep are making upon the merino flocks of the world; that unless the source of supply of these wools is maintained, certain phases of wool manufactures cannot continue; and that this source of supply cannot be preserved unless a high level of protection is maintained. Very plausible arguments can also be made in favor of the existing status of the wool-growing industry because a lowering of the duties would inevitably cause suffering both among the sheep owners and those employed in the industry.

The legislator who conscientiously endeavors to consider impartially the arguments of the free-trader and the protectionist has hard questions to answer. Shall Congress, for the sake of preserving a comparatively small number of fine merino sheep, burden the manufacturer directly and the consumer indirectly with a duty adequate to protect the grower with the highest costs? Or shall Congress say that, since the cost of producing cross-bred wool is negligible, it would be better to force all wool growers in the United States to produce this kind of wool by having free wool as the United Kingdom has with her 31,000,000 sheep? Or shall Congress take a middle course and preserve such parts of the industry as are consistent with a moderate duty? Any of these questions might be answered affirmatively from the report of the Tariff Board, but, whatever may be the correct attitude to assume toward this great industry, all will surely agree that no board, however wise, should determine the answer to the question. This question involves the problem of the nation's policy toward its industries; and, as long as there are political questions, the question of the preservation or destruction of industries will be, and most men would say ought to be, one of them. The subject is discussed somewhat at length here in order to show the nature of the efficiency problem. It must be clear that statistics are of little value in tariff making unless accompanied by sound judgment. "Without judgment," Mr. Emery says, "statistics are useless; without statistics, judgment is unreliable."³

Having pointed out what would seem to be both political and economic obstacles to delegating to an executive board general power to recommend rates, a partial solution will be suggested.

If it be admitted that a board be desirable, one of its powers would, of course, be the accumulation of information on all phases of the tariff controversy. On the basis of this information Congress, having first laid down the political and economic premises on which the board was to proceed, might request it to submit a set of rates based on the premises laid down. Such questions as these might be submitted to the board for answer: (a) What would be the immediate and ultimate effect of free wool upon the domestic industry? upon the consumer? (b) What rate of duty on raw sugar would eliminate the cane-growing industry of the

³ Emery, H. C.: *The Tariff Board and its Work*. Speech delivered at Chicago, December 8, 1910, p. 11.

South and still preserve the beet-sugar industry? (c) Assuming the theory of tariff for revenue only to be desirable, what set of rates on wool and wool manufactures would most equitably raise \$50,000,000 per annum? (d) Assuming that the tariff should equal the difference in cost of production between the United States and foreign countries and that the *status quo* of the wool-growing and wool-manufacturing industries is to remain substantially unchanged, what should the rates in Schedule K be? There seems to be no reason why a board could not give answers to these and similar hypothetical questions. This plan would leave to the legislative branch of the government not only the power of fixing the premises upon which the board was to proceed, but also the privilege of finally accepting or rejecting the recommendations of the board; and still it would leave a very useful field of work for an executive board or bureau.

For the purposes of this article it is assumed that Congress desires an answer to the last of the questions asked above and that the facts to be used are those found in the Tariff Board's report on Schedule K. This question takes for granted two facts: (1) that such protective duties should be levied "as will equal the difference between the cost of production at home and abroad" and (2) that the *status quo* of the wool-growing and wool-manufacturing industries should remain substantially unchanged, that is, the question of efficiency is to be practically disregarded. Both of these premises are debatable and the writer, by propounding them, in no way commits himself either to their support or opposition. Plausible arguments can be made for or against both propositions. It is necessary, however, before the discussion can proceed, to assume some of the varying factors in the tariff problem to be constant and there are some reasons why the premises chosen are the most desirable in studying the report of the Tariff Board.

The most important reason is the nature of the Tariff Board. The board was a by-product of a protective tariff bill, the pet of a president committed to protection; and it was requested to apply the rule of protection contained in the Republican platform of 1908. Its founders undoubtedly expected it to consider the protective system beyond controversy. It began work with a presumption, therefore, against its non-partisan attitude. If it had been composed of political opportunists, it might easily have become a mere tool of the protective interests; or if it had started

out like the so-called tariff commission of 1882 to hold hearings, the personal would have overshadowed the scientific element and the board would have been little more than a poor substitute for the Ways and Means Committee. But the members of the board⁴ realized that legislators needed, not more comments and figures compiled by interested parties, but a careful scientific investigation of each schedule of the tariff and this they began carefully to make. While considering the cost of production one of the phases of the problem deserving study, they did not limit their study to it, and in the report many other phases of the question are carefully considered which have been obscured by the political significance attached to the cost of production. The work of the Tariff Board, lamentably brief as it was, laid the foundation for a scientific investigation of the tariff; it broke the grip on legislation which a few interested parties, by their knowledge of the tariff and by personal influence, had maintained, and it proved conclusively that the Almighty did not lodge all wisdom in the committee rooms of Congress.

It remains true, nevertheless, that in the public mind the work of the Tariff Board and the cost-of-production theory of the Republican platform of 1908 are inseparable and for that reason this theory is given prominence in this article.

A subject which can only be touched upon in this article is the relative value of ad valorem and specific duties. In this country, as a rule, the advocates of revenue tariffs have favored the former; the advocates of protection, the latter. The Tariff Board made some very pertinent observations on this subject and stated that "from the point of view of protecting the domestic manufacturer by equalizing the difference in cost of production at home and abroad by means of tariff duties, the system of specific duties is the natural and logical method."⁵ It has been said that a flat specific rate bears unequally upon those who buy wool, because it does not adjust itself to a wide range of prices. This is true. But it is equally true that a flat ad valorem rate gives very

⁴At the time of the publication of the report on Schedule K the members of the Tariff Board were: Henry C. Emery, professor at Yale; Alvin H. Sanders, editor of the *Breeders' Gazette*, Chicago; James B. Reynolds, formerly assistant secretary of the Treasury; William M. Howard, formerly congressman from Georgia; and Thomas W. Page, professor at University of Virginia.

⁵Report of Tariff Board on Schedule K, 62 Cong., 2 Sess.; H. Doc. No. 342, p. 709.

unequal protection; 30 per cent on 20-cent wool is much less protection than 30 per cent on 40-cent wool and still it may be that 20-cent wool requires as much protection as 40-cent wool. This of course is only another case of the necessity of determining your premises before proceeding to discuss tariff questions. The premises on which this article is written establish a presumption in favor of specific duties. But in order to avoid confusion this question will not be discussed in detail. *Ad valorem* and specific duties will in most cases be treated as though of equal value.

Schedule K of the tariff act of August 5, 1909, fixes the import duties upon a large variety of wool products. In this discussion the following will be considered both because they are the most important and because the statistics of the Tariff Board upon them are most complete: raw wool, tops, worsted yarn, woolen and worsted fabrics.

Raw Wool

In ascertaining the cost of producing wool in the United States the Tariff Board considered wool as the chief product of the flocks and credited against the total cost all receipts from sources other than wool. In the case of the fine-wooled merino flocks, where wool was the only source of income, the entire cost of maintaining the flocks was charged against the wool and as a result the cost of production was high. On the contrary, in the case of the crossbred flocks the receipts from mutton were subtracted from the total cost of maintenance and the resulting figure was taken as the cost of producing the wool. By this means the cost of producing wool was often shown to be negligible.

Nowhere in the Tariff Board's report do figures, considered alone, prove more discouraging than in the volume on raw wool. The cost of producing wool is shown to range from less than nothing up to over 35 cents per pound and these statistics can be studied intelligently only in the light of the facts with which the Tariff Board supplemented them. The extremely high costs are given some weight by the board in making up its averages. Its conclusions recognize three broad divisions of the wool-growing industry in the United States. "In the western region of the United States, with approximately 35,000,000 sheep," the report states, "the net charge against a pound of wool is about 11 cents. In the other sections, with about 15,000,000 sheep, the net charge against a pound of wool from the merino sheep, which number approximately 5,000,000, is about 19 cents, and the net charge

against the wool grown on sheep of the crossbred type is negligible.⁶

The costs from which the average net charge of 11 cents against wool raised in the western ranges was obtained are shown in Table 1.⁷

TABLE 1.—*Net charge against wool produced in the range states*

Pounds of wool		Receipts		Average net charge against wool per pound
Number	Percentage of total	Percentage from wool	Percentage from other sources	
2,636,297	12.7	47.7	52.3	\$0.237
3,836,815	18.5	49.8	50.2	.168
5,459,088	26.3	47.4	52.6	.119
4,665,141	22.5	42.0	58.0	.077
2,293,087	9.0	36.2	63.8	.027
1,874,287	11.0	28.9	71.1	+.039
20,764,713	100.0	43.0	57.0	.109

The costs from which the average net charge of 19 cents against the fine merino wool raised in the eastern states was obtained are shown in Table 2.⁸

TABLE 2.—*Net charge against fine merino wool produced in the eastern states*

Pounds of wool		Receipts		Average net charge against wool per pound
Number	Percentage of total	Percentage from wool	Percentage from other sources	
37,934	6	78	22	\$0.42
57,083	10	77	23	.32
90,886	15	71	29	.27
129,169	22	71	29	.22
248,519	42	57	43	.12
29,588	5	38	62	.06
592,979	100	64	36	.19

The conclusion of the Tariff Board that the net charge against wool grown on crossbred flocks in eastern United States is negligible is based on the study of 159,396 pounds of wool. The total receipts from the crossbred flocks investigated were \$114,099.74,

⁶ *Report of Tariff Board on Schedule K*, pp. 376-377.

⁷ *Ibid.*, p. 329.

⁸ *Ibid.*, p. 369.

of which 33 per cent was from wool and 67 per cent from other sources. The receipts from sources other than wool a little more than covered the total cost of maintaining the flocks, which leaves the wool "velvet," that is, there was no net charge against it.⁹

There are, then, in the United States three distinct classes of sheep which produce wool at widely varying costs. Before a rate of protection can be agreed upon a national average cost must be fixed. It might be suggested that if the *status quo* is to be maintained absolutely, the rate of protection must be sufficiently high to protect the highest cost. However logical this suggestion may be, it is not practical and the position of the Tariff Board seems reasonable on this point. After giving due weight to the high and the low costs in the United States it concluded that the average net charge against the wool clip of the country is about 9½ cents per pound.¹⁰

Turning now to the cost of producing wool abroad, the Tariff Board summarized its findings by saying that the average net charge against wool in South America is "between 4 and 5 cents per pound" and that "taking Australasia as a whole it appears that a charge of a very few cents per pound lies against the great clips of that region in the aggregate."¹¹

Without questioning, therefore, the possibility of choosing other costs equally entitled to consideration, it seems at least fair to take 9½ cents as the net charge against wool in the United States and 3 cents as the net charge against wool produced by our greatest foreign competitor. These are charges per grease pound. Considering all grades of wool, the shrinkage of American wool may be taken at 60 per cent and of Australian wool at 50 per cent.¹² If now the much debated recommendation of the board to assess the duty on the scoured content of grease wool be accepted, a duty can be calculated. If it costs in the United States 9.5 cents to produce a pound of grease wool shrinking 60 per cent, it will cost 23.75 cents to produce a pound of clean wool; if it costs in Australia 3 cents to produce a pound of wool shrinking 50 per cent, it will cost 6 cents to produce a pound of clean wool. The difference between these two results is 17.75 cents, which is the difference in cost of production per scoured pound of wool between the United States and Australia. If the

⁹ *Report of Tariff Board on Schedule K*, p. 369.

¹⁰ *Ibid.*, p. 377.

¹¹ *Ibid.*, p. 11.

¹² *Ibid.*, pp. 383-385.

legislator desires to levy a flat specific rate, it will require according to this calculation about an 18-cent rate to protect the wool-growing industry in this country without forcing any serious readjustment.

To determine what ad valorem rate will give protection equal to 18 cents per scoured content pound is a complex problem, for obviously the per cent of protection fluctuates with the price. Table 3 presents representative wools and the ad valorem duty equivalent to 17.75 cents.

TABLE 3.—*Ad valorem rate on raw wool*

Grade of wool	Price per scoured pound in 1919	Difference in cost per scoured pound	Per cent of protection needed
Port Philip scoured	\$0.487	\$0.1775	36.45
Sidney scoured, good	.477	.1775	37.21
South African, very best	.507	.1775	35.01
Sidney scoured, average	.395	.1775	44.94
Australian crossbred, superior	.467	.1775	38.01
Australian crossbred, average	.294	.1775	60.37

Here again much depends upon judgment, for by choosing very high or very low prices widely divergent ad valorem rates can be shown to be required. In Table 3 representative foreign wools have been chosen and the conclusion to be drawn from the table is that 35 per cent, possibly 40 per cent, protection is necessary to protect the existing conditions of the wool-growing industry.

The rates levied on raw wool in the various bills introduced into Congress in the second session of the Sixty-second Congress were:

Cummins bill....18 cents per clean content pound (with proviso that no rate should be over 45 per cent).¹³
 Hill bill.....18 cents per clean content pound.¹⁴
 Penrose bill....18 cents per clean content pound.¹⁵
 Underwood bill..20 per cent ad valorem.¹⁶
 La Follette bill..35 per cent ad valorem.¹⁷
 Compromise bill..29 per cent ad valorem.¹⁸

¹³Amendment to H. R. 22195, proposed July 24, 1912.

¹⁴H. R. 22262, proposed March 22, 1912.

¹⁵Amendment to H. R. 22195, proposed July 27, 1912.

¹⁶H. R. 22195, proposed March 21, 1912.

¹⁷Amendment to H. R. 22195, proposed July 27, 1912.

¹⁸H. Rep. No. 1130, August 2, 1912.

Tops

Tops are combed wool and consist of continuous strands of wool in which the fibres lie more or less parallel. They constitute a distinct product, and in England and on the Continent particularly they are produced by a branch of wool manufacturing as distinct as the operations of spinning and weaving. The Tariff Board shows that the conversion cost¹⁹ of producing tops varies both with the process employed (whether French or English) and with the amount of output. A good illustration of the latter is given in its report. The total production of a combing mill for 25 months of domestic half-blood tops is divided into four periods. In the first period 46.40 per cent of the total output was produced at the cost of 4.91 cents per pound; in the second period 24.19 per cent of the total output was produced at a cost of 6.79 cents per pound; in the third period 16.81 per cent of the total output was produced at a cost of 7.75 cents per pound; and in the fourth period 12.60 per cent of the total output was produced at a cost of 10.05 cents per pound.²⁰

"Top making" is a more comprehensive term than "combing." The cost-of-production figures given by the board are for combing and do not include such costs as storage, losses from off-orts, etc., which a manufacturer making tops alone must take account of. The board does not state to what extent the cost of top making exceeds the cost of combing, so that the opinion of the trade must be resorted to. It seems to be recognized that the cost of top making is 50 per cent greater than of combing and this percentage has been used in determining the costs in this article.

For the purpose of this discussion the costs of combing with English combs has been adopted and allowance has been made for the fluctuations in costs due to fluctuations in output. Table 4

TABLE 4.—*The conversion cost of combing and top making per pound in the U. S.*

Quality of top	Conversion cost of combing	Conversion cost of top making (combing plus 50 per cent)
Unwashed territory, one half blood or above	\$0.0760	\$0.1140
Australian and domestic, one half blood and above	.0679	.1018
Unwashed territory, three-eighths blood	.0619	.0928
Australian or domestic, three-eighths blood	.0610	.0915
Australian or domestic high, one-quarter blood	.0562	.0843
Quarter blood	.0448	.0672

¹⁹ By conversion cost is meant the cost of converting the raw material into the finished product. It does not include the cost of materials.

²⁰ *Report of the Tariff Board on Schedule K*, p. 642.

presents the costs of the Tariff Board²¹ which seem most nearly to represent the board's conclusions.

The Tariff Board gave no elaborate statistics on the cost of combing and top making abroad. But it felt able, upon the basis of its information, to state the relative positions of the industry in this country and in England. "In view of the facts related," it says in conclusion, "it seems a fair statement that the cost of making tops in the United States is about 80 per cent greater than abroad."²² For a given product in England, therefore, with a cost of 100 units there would be in the United States a cost of 180 units.

The foregoing conclusions are adhered to in subsequent calculation on the costs of producing tops. In Table 5 the effect of the top duties in the La Follette, Underwood, and Compromise bills are compared with the Tariff Board costs. The conclusions of the table, it should be noted, consider only the differences in conversion costs.

In constructing this table English prices were taken for stand-

TABLE 5.—*The net protection given to tops by the La Follette, Underwood, and Compromise bills compared with the findings of the Tariff Board*

Quality of tops	1	2	3	4	5 Compensatory duty		
	English price (1911)	English total cost	English top-making conversion cost	Cost of wool in one pound of top	La Follette bill (35 per cent) ¹	Underw'd bill (20 per cent) ¹	Compromise bill (29 per cent) ¹
32s	\$0.261	\$2486	\$0.0374	\$0.2112	\$0.0739	\$0.0422	\$0.0612
36s	.269	.2562	.0468	.2094	.0733	.0419	.0607
40s	.274	.2610	.0509	.2101	.0735	.0420	.0609
50s	.360	.3429	.0516	.2913	.1020	.0583	.0845
64s	.533	.5076	.0566	.4510	.1579	.0902	.1308
80s	.593	.5648	.0633	.5015	.1755	.1003	.1454

Quality of tops	8	9	10	11
	Protection under			
	La Follette bill (40 per cent) ²	Underwood bill (25 per cent) ²	Compromise bill (32 per cent) ²	Protection needed according to Tariff Board
32s	\$0.0305	\$0.0231	\$0.0223	\$0.02992
36s	.0343	.0254	.0254	.03744
40s	.0361	.0265	.0268	.04072
50s	.0420	.0317	.0307	.04128
64s	.0553	.0431	.0398	.04528
80s	.0617	.0480	.0444	.05064

¹ Total duty on raw wool.

² Total duty on tops.

²¹ *Report of the Tariff Board on Schedule K*, p. 642.

²² *Ibid.*, pp. 644-645.

ard qualities of tops. The total English cost (column 2) was computed by subtracting from the price an assumed distribution expense and profit of 5 per cent. An objection will be made to this method on the ground that it is "unscientific," but for the purpose of this discussion it is likely to be more accurate than the computation of the total English cost from the prices of raw wool. The English top making conversion costs are computed from the statistics of the Tariff Board; and by subtracting them from the total English cost, the cost of the wool in one pound of top is determined. The compensatory duty in cents under each of the bills is computed by multiplying the figures in column 4 by the ad valorem rate imposed by the respective bills upon raw wool. The English price is then multiplied by the ad valorem rate fixed by each bill on tops and from the result is subtracted the corresponding compensatory duties. This gives the net amount of protection under each bill and is to be compared with the difference in conversion costs between this country and England as determined by the Tariff Board (column 11).

If the prices used in Table 5 had been for a low-price year, the net protection given by each of the bills would have been less than shown. This is, from the point of view of protection, one of the unavoidable disadvantages of ad valorem duties. A given ad valorem rate may be protective when prices are at one level and not protective when they are at another.

In the La Follette, Underwood, and Compromise bills, where the duty on tops was a flat ad valorem rate, it was possible to compute the net protection separately from the compensatory duty. In studying the Penrose and Hill bills, where the duty on the tops was a specific and a compound duty, respectively, a different method must be followed. Table 6 is a comparison of the total

TABLE 6.—*The duties on tops in the Penrose and Hill bills compared with the Tariff Board costs*

Qual- ity of tops	Price in England (1911) per pound	Duty under Pen- rose bill per pound	Duty under Hill bill per pound	Protection and compensation needed per Tariff Board ¹ per pound	Protection and compensation needed		
					Per cent	Per cent	Per cent
32s	\$0.261	\$0.28	\$0.2131	\$0.2449	107.28	81.65	93.83
36s	.269	.28	.2135	.2524	104.09	79.37	93.83
40s	.274	.28	.2137	.2557	102.19	77.99	93.32
50s	.360	.28	.2180	.2563	77.78	60.56	71.19
64s	.533	.28	.2267	.2603	52.53	42.53	48.83
80s	.593	.28	.2298	.2656	47.22	38.75	44.79

¹ \$0.215 plus difference in Conversion Cost.

protection and compensation given on tops by the Penrose and Hill bills with the total protection and compensation required according to the Tariff Board.

The Penrose bill levies a flat specific rate of 28 cents on tops and the rate under the Hill bill is 20 cents per pound and 5 per cent ad valorem. From these rates the duty in cents per pound is arrived at. In computing the total protection and compensation required according to the Tariff Board 18 cents is adopted as the duty on the clean content of wool and, making allowance for waste, 21½ cents was taken as a fair compensatory duty: that is, the duty which must be assessed in order simply to compensate the domestic top maker for the rise in the price of his raw material due to the 18-cent duty on raw wool. To this compensatory duty was added the difference in conversion cost between here and abroad as set forth in column 11 of Table 5. The last three columns in Table 6 are the preceding three expressed in percentages.

One of the noticeable features of the percentages in Table 6 is the fact that the tops of low quality receive or require a larger duty than the tops of a higher quality. Such a difficulty arises inevitably from a flat specific compensatory duty. In theory, if the rate of duty on raw wool is the same on all grades of wool, the compensatory duty on the manufactured product should be the same on all qualities. In practice, however, a flat specific compensatory duty bears more heavily on the lower than on the higher qualities of product, and it results in a higher ad valorem equivalent on the lower qualities. Apparently, the practical thing to do is to grade the compensatory duties in order to retain, from the point of view of protection, the advantages of specific duties and still eliminate the excessive duties on the lower qualities.

On the basis of the premises of this article, then, what is a fair rate on tops? Table 5 shows that 40 per cent ad valorem is adequate, in most cases, if the duty on raw wool is 35 per cent ad valorem, but a somewhat higher rate is defensible as will be observed from Table 6. A decline in price would, of course, make the calculations of this table useless. From the standpoint of protection, if the duty on raw wool is specific, the duty on tops should also be specific. The conversion cost of tops is, as compared with the material cost, relatively small and their price is affected directly by the price of raw wool. For the protectionist the most desirable method for levying the duty on tops would

seem to be a carefully graded specific duty. If this be conceded and if the duty on raw wool be 18 cents on the clean pound, a duty of 26 or 27 cents per pound of tops of 60s quality, graded both up and down, would undoubtedly be a fair duty—granted of course the premises on which the calculations have been made.

Worsted Yarns

The conversion costs of converting tops into worsted yarns in the United States, as found in the report of the Tariff Board, are summarized in Table 7.

TABLE 7.—*Conversion cost per pound of producing worsted yarns from tops in the U. S.*²³

Ply and count of yarn . . .	2/28	2/32	2/36	2/38	2/40
Conversion cost per pound . .	\$0.1262	\$0.1448	\$0.1648	\$0.1749	\$0.1798
Ply and count of yarn . . .	2/42	2/44	2/46	2/48	2/60
Conversion cost per pound . .	\$0.1847	\$0.2055	\$0.2267	\$0.2335	\$0.3181

After discussing the American costs and comparing them with English costs, the Tariff Board sums up the relative competitive positions of the two countries in the following words:

In view of the fact that the figures as given for the United States have been put at what may be considered a low figure when compared with the large number of mills from which figures were received, it may be said that, making due allowance for variations on account of quality, etc., the actual manufacturing cost in the United States for turning tops into yarn is about twice what it is in England.²⁴

The conversion cost of converting tops into yarns in England, then, may be taken as substantially one half the costs presented in Table 7.

The costs here discussed include those of drawing, spinning, twisting, and spooling, and do not include those of sorting, carding, and combing which were considered under the cost of making tops. It is necessary, therefore, in order to determine the cost of converting raw wool into worsted yarns, to add to the costs of converting tops into yarn the costs of combing. This has been done in making the subsequent tables on yarns. To one who analyses carefully the figures of these tables it will be evident

²³ *Report of the Tariff Board on Schedule K*, p. 649.

²⁴ *Ibid.*, p. 650.

that the cost of combing alone, not the cost of top making, has been added to the cost of converting tops into yarn, that is, the 50 per cent added to the cost of combing in computing the cost of top making is not here added in computing the total conversion cost of yarn. The reason for this is the fact that some of the costs incidental to a combing establishment are absent where combing is merely one department of a spinning mill.

In Table 8 the net protection on worsted yarns given by the La Follette, Underwood, and Compromise bills is computed and compared with the findings of the Tariff Board.

In Table 8 the total cost of the yarn is computed in substantially the same way as it was computed in the case of tops (Table 5), that is, an allowance of $12\frac{1}{2}$ per cent to cover distribution expenses and profit was taken from the price; from the total cost was subtracted the English conversion cost in order to determine the cost of wool in one pound of yarn (column 5). Column 5 is then multiplied by the rates on raw wool in the respective bills in order to determine the amount of the yarn duty needed for compensation. Columns 9, 10, and 11 are the rates on yarn in the respective bills times the price and less the compensatory duty. The result gives the net protection furnished by each bill and should be compared with the protection needed according to the findings of the Tariff Board (column 12).

The protection on yarns needed according to the Tariff Board in Table 8 is a minimum. The net protection given by even the La Follette bill falls in most cases slightly under the protection required. It may be fairly said that 45 per cent on the basis of 35 per cent on raw wool is not, according to the Tariff Board, sufficient protection. The fact should be noted also that a decline in the price of yarns would, under ad valorem duties, reduce the net protection given.

Table 9 (p. 76) presents the total protection and compensation given by the Penrose and Hill bills, on yarns, and the amount required according to the findings of the Tariff Board.

The yarn duty in the Penrose bill, as shown in column 2, is a graded specific duty—graded according to the count of the yarn. The yarn duty in the Hill bill is a compound duty and the computations for the yarns in the table are shown in column 3. Column 4 shows the protection and compensation in cents required according to the Tariff Board and is made up of a compensatory duty of 23 cents per pound and the difference in conversion costs

TABLE 8.—*The net protection given to worsted yarns by the La Follette, Underwood, and Compromise bills and compared with the findings of the Tariff Board*

TABLE 9.—*The total duties on worsted yarns under the Penrose and Hill bills compared with the findings of the Tariff Board*

¹ \$30,23 plus difference Conversion Cost.

for yarns as found in column 12 of Table 8. It will be noticed that this compensatory duty is higher than the one recommended by the board when the duty on raw wool is 18 cents.²⁵ This is a concession to the critics of the board who said that the compensatory duty should be based, not on the scoured content of grease wool, but on the duty on scoured wool which in a bill with a duty of 18 cents on the scoured content of grease wool would be at least 19 cents. In this article, therefore, the benefit of the doubt on this point has been resolved in favor of the manufacturer and the compensatory duty has been based on the recommendations of the board for a raw wool duty of 19 cents.²⁶ Columns 5, 6, and 7 are columns 2, 3, and 4 expressed in percentages. Here it is found, as in considering the top duties of these bills, that the duties are much heavier on the low grade yarns than on the higher. This defect can be corrected by properly grading the specific part of the duties.

Considering all the bills studied the method of levying the duties on yarns in the Penrose bill is the most desirable from the point of view of protection. "Yarns," the Tariff Board says, "are comparatively well standardized and their cost varies in a certain regular relation to the fineness or count of the yarn. It is a simple matter, then, to adopt the specific system in this particular case. A duty can be assessed on No. 1 yarn and be made to increase by a certain proportion with each additional count of yarn."²⁷ These suggestions were followed by the framers of the Penrose bill. By referring to Table 9 it will be observed that a rate of 41 or 42 cents per pound on 2/60s is approximately in accord with the findings of the Tariff Board. This rate should be graded up and down according to the count of the yarn.

An ad valorem rate on yarns is, from a protective point of view, inadvisable, but if it is adopted the rate should be at least 50 per cent on the basis of 35 per cent wool. It was evident from Table 8 that the 45 per cent given by the La Follette bill was scarcely ample to cover the minimum difference in conversion cost.

Woolen and Worsted Fabrics

When the question of the duty on woolen and worsted fabrics is taken up, a field is entered upon vastly more complicated than

²⁵ *Report of the Tariff Board on Schedule K*, p. 626.

²⁶ *Ibid.*, p. 626.

²⁷ *Ibid.*, p. 710.

that of tops and yarns. In investigating the cost of weaving, the Tariff Board chose 55 samples of woolen and worsted fabrics which included samples of all the standard varieties used for men's and women's wear. The board, in the first place, obtained the actual weaving cost of each fabric from the mill originally making it; in the next place, it submitted the various samples to foreign and domestic manufacturers making similar goods, and obtained from them, after their books had been studied by the board's agents, the cost at which they could make the fabrics. The figures were checked and compared and the record of each sample written up.²⁸ The board contented itself with giving the costs of converting yarn into cloth and it made no effort to report specifically on the conversion costs of the tops and yarns used in the making of the fabrics. Nor did it attempt to connect its investigation of weaving costs with its costs of combing and spinning. An effort will here be made to do this. In Table 10 the difference in conversion costs between this country and abroad for the samples reported on by the Tariff Board is calculated from the raw wool through combing and spinning to the finished fabrics. Those samples on which no English costs were obtained are not included. In this table the classification of the Hill bill has been adopted, not necessarily because it is the last word on classification, but because it was the one most discussed in the Sixty-second Congress.

The unit of measure in Table 10 is one pound of cloth. Before the difference in conversion costs of the tops and yarn entering into a pound of cloth could be computed, it was necessary to determine how much waste there is in combing and spinning. It should be clear that, because of the wastes in these processes, it requires more than a pound of yarn to make a pound of cloth and more than a pound of top to make a pound of worsted yarn. The conversion cost of the material wasted, however, must be considered in calculating the total conversion cost of a fabric. At best the method by which the figures in Table 10 were computed is complex. The best way to make it clear is to take one sample and follow it through all the computations.

Sample No. 22 is a men's blue serge weighing 14 ounces to the yard. In making the yarn required to make one pound of this fabric approximately 1.24 pounds of top were consumed. The difference in the conversion costs, between this country and Eng-

²⁸ Report of the Tariff Board in Schedule K, pp. 651-690.

TABLE 10.—*The ad valorem duty necessary to cover the difference in conversion costs for the samples reported on pages 651 to 690 of the Tariff Board's report on Schedule K*

Sample No.	Name of cloth	1 Weight ozs. per yd.	2 Difference in conversion cost for cloth	3 Difference in conversion cost for yarn in 1 lb. of cloth	4 Difference in weaving con- version cost per lb. of cloth	5 Total differ- ence in con- version cost of 1 lb. of cloth (2+3+4)	6 Price (English total cost plus 17½ per cent) per lb.	7 Ad valorem rate neces- sary to cover conversion cost (5 ÷ 6)
Valued at not more than 40 cents per pound								
4	Women's cotton warp sacking.....	8.5	.....	.00414	.0077	.01184	.3971	29.82
13	Men's fancy woolen suiting.....	16.0	.....	.0418	.088	.1293	.3905	33.16
Valued at more than 40 and not more than 60 cents per pound								
14	Fancy woolen overcoating.....	18.5	.....	.0477	.087	.1337	.4116	32.72
21	Fancy woolen overcoating.....	16.0	.....	.0396	.128	.1676	.5166	32.45
28	Men's fancy woolen suiting.....	13.0	.00049	.0570	.180	.2419	.5900	41.00
Valued at more than 60 and not more than 80 cents per pound								
1	Worsted Panama.....	4.2	.0438	.0698	.152	.2656	.6872	38.65
2	Fancy cotton worsted.....	6.7	.0077	.0327	.099	.1394	.6285	22.18
3	Brilliantine.....	3.7	.0290	.0496	.174	.2526	.7715	32.74
8	Women's homespun.....	8.2	.....	.0696	.131	.2006	.7774	25.80
9	Woolen tweed.....	12.2	.0007	.0699	.100	.1706	.6368	26.79
12	Women's worsted serge.....	9.0	.0438	.0715	.161	.2763	.7209	38.33
15	Women's worsted cheviot.....	10.0	.0431	.0706	.168	.2917	.6869	41.01
16	Covert.....	11.6	.....	.0767	.141	.2177	.7731	28.16
22	Men's blue serge.....	14.0	.0434	.0646	.117	.2250	.6594	34.12
23	Men's blue worsted serge.....	12.0	.0410	.0623	.175	.2783	.7364	37.79
25	Fancy cassimere.....	16.0	.....	.0542	.131	.1852	.6423	28.83
27	Women's cheviot.....	13.0	.0441	.0402	.179	.2633	.6888	38.23
32	Fancy fine woolen.....	12.0	.....	.0765	.253	.3295	.7844	42.01
34	Fancy worsted suiting.....	11.5	.0420	.0728	.240	.3548	.7701	46.07
41	Black thibet.....	17.0	.....	.0366	.146	.1826	.7752	23.56
Valued at more than 80 cents and not more than \$1. per pound								
10	Women's all-wool blue serge.....	7.5	.0488	.0777	.203	.3295	.8467	38.92
17	Women's all-wool sacking.....	10.5	.....	.0623	.160	.2223	.8356	26.60
24	Fancy cotton warp worsted.....	13.0	.0220	.0599	.189	.2008	.9496	21.15
26	Fancy cotton warp worsted.....	11.2	.0264	.0663	.200	.2927	.8687	33.70
30	Fancy worsted.....	14.0	.0500	.0664	.169	.2834	.9414	30.32
33	Covert wool.....	14.0	.....	.1000	.177	.2770	.9176	30.18
37	Men's black clay worsted.....	16.0	.0484	.0671	.156	.2715	.9895	27.44
44	Woolen overcoating.....	24.0	.....	.0803	.118	.1983	.8257	24.02
46	Uniform.....	21.0	.....	.0640	.152	.2160	.9844	21.94
Valued at more than \$1. and not more than \$1.50 per pound								
5	All-wool batiste.....	2.6	.0496	.1350	.384	.5686	1.4363	39.59
6	All-wool Panama.....	4.7	.0468	.1244	.238	.4092	1.1489	35.62
7	All-wool batiste.....	3.7	.0476	.1212	.305	.4738	1.3038	36.34
20	Women's all-wool broadcloth.....	9.3	.....	.1100	.194	.3040	1.0181	29.86
36	Men's blue serge.....	18.0	.0528	.0757	.130	.2585	1.1489	22.50
38	Fancy worsted suiting.....	11.5	.0460	.0750	.271	.3920	1.2140	32.29
42	Men's light weight blue serge.....	13.0	.0488	.1111	.258	.4179	1.2293	34.00
45	Men's fancy half worsted suiting.....	13.2	.0216	.1124	.246	.3800	1.3548	28.05
47	Black unfinished worsted.....	15.0	.0492	.1007	.237	.3869	1.1471	33.73
48	Men's unfinished worsted.....	14.0	.0488	.1150	.228	.3918	1.0998	35.62
49	Men's serge.....	13.0	.0488	.0972	.264	.4100	1.1050	37.10
Valued at more than \$1.50 per pound								
52	Silk mixed worsted.....	14.2	.0500	.1602	.444	.6542	1.6642	39.31
53	Men's unfinished worsted.....	14.5	.0484	.2389	.391	.6783	1.6000	42.39

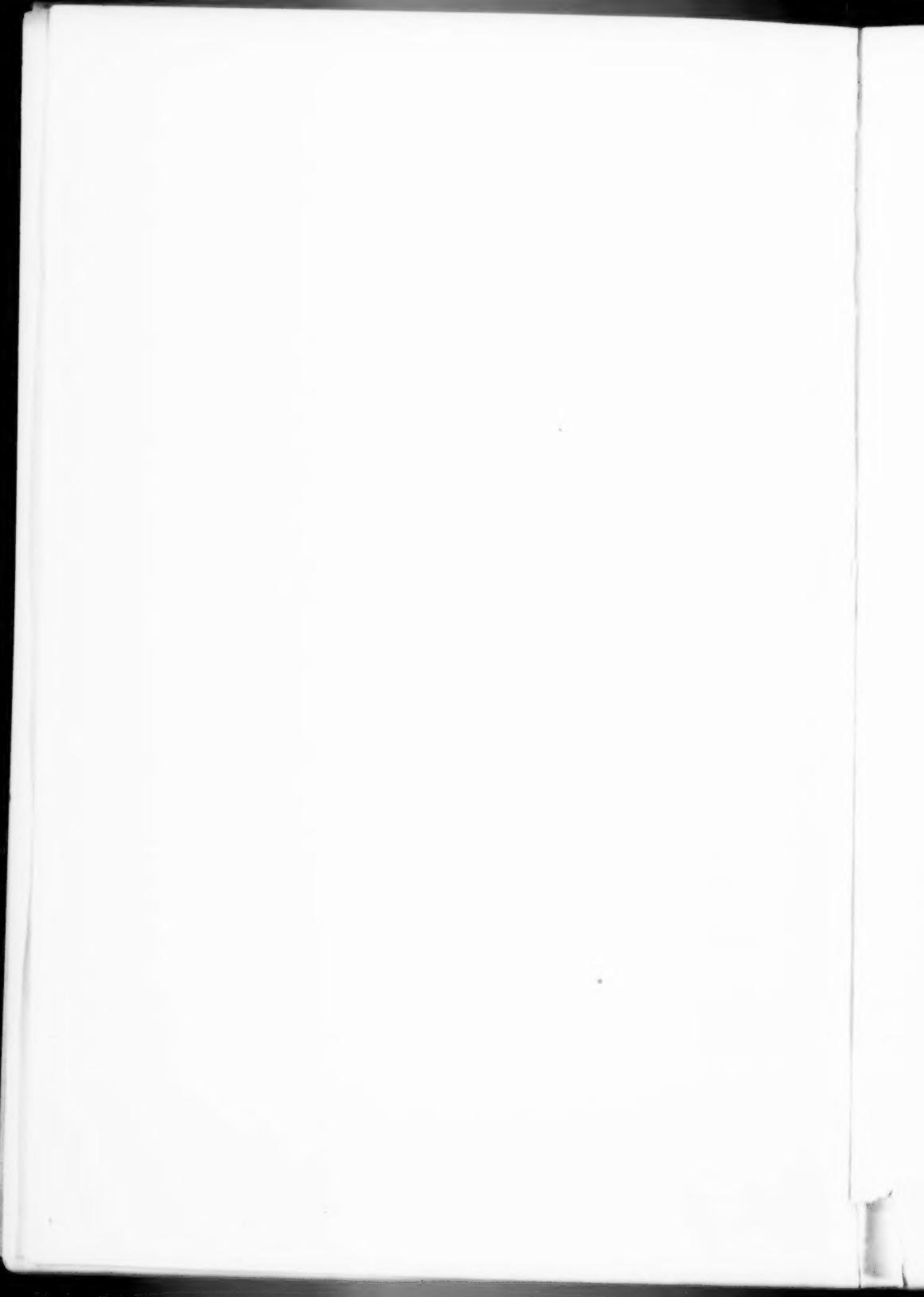
TABLE 11.

Sample No.

	Value	Value
4	13	Value
13		and per
14		Value
21		and per
28		Value
1		and per
2		Value
3		and per
8		Value
9		and per
12		Value
15		and per
16		Value
22		and per
23		Value
25		and per
27		Value
32		and per
34		Value
41		and per
10		Value
17		and per
24		Value
26		and per
30		Value
33		and per
37		Value
44		and per
46		Value
5		and per
6		Value
7		and per
20		Value
36		and per
38		Value
42		and per
45		Value
47		and per
48		Value
49		and per
52		Value
53		and per

TABLE 11.—The duties on woolen and worsted fabrics under the Hill bill (L. R. 22262) compared with the findings of the Tariff Board

Sample No.	Classification	Weight in ounces per yard	Price per pound	Per cent of wool in cloth	Compensatory duty based on rate of 18 cents on scoured content of wool	Ad valorem rate under Hill bill	Ad valorem duty in cents	Total duty under Hill bill in cents	Total duty under Hill bill	Protection and compensation required according to Tariff Board		
										5	6	7
4	Valued at not more than 40 cents per pound	8.5	\$0.3971	41.7	\$0.1043	30	\$0.1191	\$0.2234	56.26	26.27	29.82	56.09
13		16.0	.3905	41.1	.1028	30	.1172	.2200	56.34	26.33	33.16	59.49
14	Valued at more than 40 cents and not more than 60 cents per pound	18.5	.4116	100.0	.2600	35	.1441	.4041	98.18	63.17	32.72	95.89
21		16.0	.5166	100.0	.2600	35	.1808	.4408	85.33	50.33	32.45	82.78
28		13.0	.5900	100.0	.2600	35	.2065	.4665	79.07	44.07	41.00	85.07
1	Valued at more than 60 cents and not more than 80 cents per pound	4.2	.6872	100.0	.2600	40	.2749	.5349	77.84	37.83	38.65	76.18
2		6.7	.6285	17.2	.0447	40	.2514	.2961	47.11	7.11	22.18	29.29
3		3.7	.7715	68.7	.1786	40	.3086	.4872	63.15	23.15	32.74	55.89
8		8.2	.7775	100.0	.2600	40	.3110	.5710	73.45	33.44	25.80	59.24
9		12.2	.6368	100.0	.2600	40	.2547	.5147	80.83	40.83	26.79	67.62
12		9.0	.7209	100.0	.2600	40	.2884	.5484	76.07	36.07	38.33	74.40
15		10.0	.6869	100.0	.2600	40	.2748	.5348	77.86	37.85	41.01	78.86
16		11.6	.7731	100.0	.2600	40	.3092	.5692	73.63	33.63	28.16	61.79
22		14.0	.6594	100.0	.2600	40	.2638	.5238	79.44	39.43	34.12	73.55
23		12.0	.7364	100.0	.2600	40	.2946	.5546	75.31	35.31	37.79	73.10
25		16.0	.6423	100.0	.2600	40	.2569	.5169	80.48	40.48	28.83	69.31
27		13.0	.6888	100.0	.2600	40	.2755	.5355	77.74	37.75	38.23	75.98
32		12.0	.7844	100.0	.2600	40	.3138	.5738	73.15	33.15	42.01	75.16
34		11.5	.7701	100.0	.2600	40	.3080	.5680	73.76	33.76	46.07	79.83
41		17.0	.7752	100.0	.2600	40	.3101	.5601	72.25	33.54	23.56	57.10
10	Valued at more than 80 cents and not more than \$1 per pound	7.5	.8467	100.0	.2600	45	.3810	.6410	75.71	30.71	38.92	69.63
17		10.5	.8356	100.0	.2600	45	.3760	.6360	76.11	31.12	26.60	57.72
24		13.0	.9496	52.3	.1360	45	.4273	.5633	59.32	14.32	21.15	35.47
26		11.2	.8687	48.1	.1251	45	.3909	.5160	59.40	14.40	33.70	48.10
30		14.0	.9414	100.0	.2600	45	.4236	.6836	72.62	27.62	30.32	57.94
33		14.0	.9176	100.0	.2600	45	.4129	.6729	73.33	28.33	30.18	58.51
37		16.0	.9895	100.0	.2600	45	.4453	.7053	71.28	26.28	27.44	53.72
44		24.0	.8257	100.0	.2600	45	.3716	.6316	76.49	31.49	24.02	55.51
46		21.0	.9844	100.0	.2600	45	.4430	.7030	71.41	26.41	21.94	48.35
5	Valued at more than \$1 and not more than \$1.50 per pound	2.6	1.4362	100.0	.2600	50	.7181	.9781	68.10	18.10	39.59	57.69
6		4.7	1.1489	100.0	.2600	50	.5745	.8345	72.63	22.63	35.62	58.25
7		3.7	1.3038	100.0	.2600	50	.6519	.9119	69.94	19.94	36.34	56.28
20		9.3	1.0181	100.0	.2600	50	.5091	.7691	75.54	25.54	29.86	55.40
36		18.0	1.1489	100.0	.2600	50	.5745	.8345	72.63	22.63	22.50	45.13
38		11.5	1.2140	100.0	.2600	50	.6070	.8670	71.42	21.42	32.29	53.71
42		13.0	1.2293	100.0	.2600	50	.6147	.8747	71.15	21.15	34.00	55.15
45		13.2	1.3548	100.0	.2600	50	.6774	.9374	69.19	19.19	29.05	47.24
47		15.0	1.1471	100.0	.2600	50	.5736	.8336	72.67	22.67	33.73	56.40
48		14.0	1.0998	100.0	.2600	50	.5499	.8099	73.64	23.64	35.62	59.26
49		13.0	1.1050	100.0	.2600	50	.5525	.8125	73.53	23.53	37.10	60.63
52	Valued at more than \$1.50 per pound	11.2	1.6642	100.0	.2600	55	.9153	1.1753	70.62	15.62	39.31	54.93
53		14.5	1.6000	100.0	.2600	55	.8800	1.1400	71.25	16.25	42.39	58.64



land, of the top in this fabric is 3.5 cents per pound and the corresponding cost for 1.24 pounds is 4.34 cents. By this means all the figures in column 2 were computed.

In making one pound of sample No. 22 approximately 1.13 pounds of worsted yarns were used—.60 of a pound were used in the warp and .53 of a pound were used in filling; 2/24s were used in the warp. According to the Tariff Board the difference in conversion cost between this country and England of 2/24s is 6.31 cents per pound and the corresponding figure for .60 of a pound would be 3.79 cents; 1/12s were used in the filling. While no cost was given for 1/12s by the Tariff Board, a fair estimate on the basis of the costs given would make the difference in conversion cost between this country and abroad for one pound of this yarn 5.04 cents and the corresponding cost for .53 of a pound would be 2.67 cents. Adding 3.79 cents and 2.67 cents the result is 6.46 cents—the difference in conversion costs between this country and abroad of making the yarn in one pound of sample No. 22. This method of calculating the yarn costs was followed in the case of each sample and the results are to be found in column 3.

The American weaving cost for sample No. 22 was 22.2 cents per yard and the English weaving cost was 11.93 cents per yard.²⁹ The latter cost was subtracted from the former in order to obtain the difference in the weaving conversion costs per yard between this country and abroad. This difference per yard was then reduced to the corresponding difference per pound or 11.7 cents. In this manner each of the costs in column 4 of Table 10 was computed.

Column 5 is the sum of columns 2, 3, and 4 and shows the total difference in cents per pound between this country and England of converting wool through all the processes into finished cloth. For sample No. 22 this cost is 22.5 cents.

It next became necessary to determine the price on which the duty would be assessed if the fabric in question were imported. Under the present administration of the customs, this price would of course be the foreign price. The Tariff Board did not give prices for the samples under discussion, but it did give the total costs. Upon the basis of the total cost the price is computed. Recurring to sample No. 22: The total English cost, *i. e.*, both material and conversion costs, for this sample was 49.11 cents per

²⁹ Report of the Tariff Board on Schedule K, p. 665.

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yard.³⁰ This total cost per yard was reduced to the total cost per pound and to it was added 17½ per cent of itself in order to determine a figure on which the duty should be assessed. This method is employed by the customs officials when goods are billed to this country at cost; and 17½ per cent is a fair allowance for distribution expenses and profit. For sample No. 22 the figure on which the duty would be assessed is 65.94 cents per pound. This is the way column 6 was made up.

Column 7 is the real object of all the computations in Table 10. It is the per cent which column 5 is of column 6; in other words, it is the total difference in conversion costs between this country and England expressed in percentage. If, then, a duty were being levied just adequate to offset the disadvantages of the American manufacturer arising from the difference in conversion costs alone between here and England of sample No. 22, the ad valorem rate would be 34.12 per cent. This duty, of course, does not provide for compensation on account of a duty on raw wool.

There are certain other observations to be made concerning the method by which Table 10 was constructed. No effort was made to work out the top costs in column 2 according to the particular qualities of top in the warp and weft. For the purpose of avoiding confusion and possible inaccuracy, the difference in the conversion costs, between this country and England, of one pound of tops of the lower qualities was taken at 3.5 cents and of one pound of the higher qualities at 4 cents. These costs correspond approximately to the results of the discussion of tops above. Such variations as occur in column 2 are due to variations in the amount of top used in making one pound of each fabric. Whenever the spaces are blank in column 2, the fabrics considered are woolens, as distinguished from worsteds, and no tops were used in their manufacture. Whenever the fabric considered was in part worsted, only the actual tops used were considered.

In some cases in the construction of Table 10 it was necessary to make use of information generally familiar to manufacturers, but not found in the report of the Tariff Board. This was true in proportioning the material in a pound of cloth between the warp and weft and in some cases in estimating the amount of loss of material in the various processes. In obtaining the costs of all the various kinds of yarns used in the construction of the sample under discussion several sources of information had to be resorted

³⁰ *Ibid.*, p. 665.

TABLE 12.—*The duties on woolen and worsted fabrics under the Penrose bill compared with the findings of the Tariff Board*

Sample No.	Classification	1 Weight in ounces per yard	2 Price per pound	3 Compensa- tory duty in bill per pound	4 Ad valorem rate in bill per pound	5 Ad valorem duty in cents per pound	6 Total duty under Pen- rose bill	7 Total duty under Pen- rose bill	8 Total duty required by Tariff Board
4	Valued at more than 30 cents and not more than 40 cents per pound								
13		8.5 16.0	.803971 .3905	.80,20 .20	.35 .35	\$.01390 .1367	\$.03390 .3367	85.37 86.22	56.09 59.49
14	Valued at more than 40 cents and not more than 50 cents per pound	18.5	.4116	.24	.45	.1852	.4252	103.30	95.89
21	Valued at more than 50 cents and not more than 60 cents per pound	16.0	.5166	.28	.45	.2325	.5125	99.21	82.78
28		13.0	.5900	.28	.45	.2655	.5455	92.46	85.07
1	Valued at more than 60 cents and not more than 80 cents per pound	4.2	.6872	.32	.50	.3436	.6636	96.57	76.48
2		6.7	.6285	.32	.50	.3143	.6343	100.92	79.29
8		8.2	.7774	.32	.50	.3887	.7087	91.16	59.24
9		12.2	.6368	.32	.50	.3184	.6384	100.25	67.62
12		9.0	.7209	.32	.50	.3605	.6805	94.40	74.40
15		10.0	.6869	.32	.50	.3435	.6635	96.59	78.86
16		11.6	.7731	.32	.50	.2866	.7066	91.40	61.79
22		14.0	.6594	.32	.50	.3297	.6497	98.53	73.55
23		12.0	.7364	.32	.50	.3682	.6883	93.45	73.10
25		16.0	.6423	.32	.50	.3212	.6412	99.83	69.31
27		13.0	.6888	.32	.50	.3444	.6644	96.46	75.98
32		12.0	.7833	.32	.50	.3922	.7122	90.80	75.16
34		11.5	.7791	.32	.50	.3851	.7051	91.56	79.83
41		17.0	.7752	.32	.50	.3876	.7076	91.28	57.10
10	Valued at more than 80 cents per pound	7.5	.8467	.35	.55	.4657	.8157	96.34	69.63
17		10.5	.8356	.35	.55	.4596	.8096	96.89	57.72
24		13.0	.9496	.35	.55	.5223	.8723	91.86	35.47
26		11.2	.8687	.35	.55	.4778	.8278	95.29	48.10
30		14.0	.9414	.35	.55	.5178	.8678	92.18	57.94
33		14.0	.9176	.35	.55	.5047	.8547	93.15	58.51
37		16.0	.9895	.35	.55	.5442	.8942	90.37	53.72
44		24.0	.8257	.35	.55	.4541	.8041	97.38	55.51
46		21.0	.9844	.35	.55	.5414	.8914	90.55	48.35
20		9.3	1.0181	.35	.55	.5600	.9100	89.38	53.40
36		18.0	1.1489	.35	.55	.6319	.9819	85.46	43.13
38		11.5	1.2140	.35	.55	.6677	1.0177	83.83	53.71
42		13.0	1.2293	.35	.55	.8761	1.2261	99.74	55.15
45		13.2	1.3548	.35	.55	.7451	1.0951	80.83	47.24
47		15.0	1.1471	.35	.55	.6309	.9809	85.51	56.40
48		14.0	1.0998	.35	.55	.6049	.9549	86.82	39.26
49		13.0	1.1050	.35	.55	.6078	.9578	86.68	60.63
52		14.2	1.6642	.35	.55	.9153	1.2653	76.03	54.93
53		14.5	1.6000	.35	.55	.8800	1.2300	76.88	58.64

TABLE 13.—*K*

Sample No.

1	W
5	Al
6	Al
7	Al
8	W
9	W
10	W
12	W
14	Fa
15	W
16	Co
17	W
20	W
21	Fa
22	Me
23	Me
25	Fa
27	W
28	Me
30	Fa
32	Fa
33	Co
34	Fa
36	Me
37	Me
38	Fa
41	Bl
42	Me
44	W
45	Me
46	U
47	Bl
48	Me
49	Me
52	Sil
53	Me

TABLE 13.—*Rates of the Underwood, La Follette, and Compromise bills applied to samples in the Tariff Board report on pages 651-690 and compared with Tariff Board findings*

Sample No.	Name of cloth	1	2	3	4	5	6	7	8	9	10	11
		Price on which duty is assessed per yard	Cost of raw material per cent	UNDERWOOD BILL			LA FOLLETTE BILL			COMPROMISE BILL		
				Compensa- tory duty	Protective duty	Needed ad valorem to cover conversion cost	Compensa- tory duty	Protective duty	Needed ad valorem to cover conversion cost	Compensa- tory duty	Protective duty	Needed ad valorem to cover conversion cost
1	Worsted Panama	\$0.18	53	11	29	39	18	37	39	15	34	39
5	All wool batiste .....	.23	56	11	29	40	20	35	40	16	33	40
6	All wool Panama .....	.34	61	12	28	36	31	34	36	18	31	36
7	All wool batiste .....	.30	60	12	28	36	21	31	36	17	32	36
8	Women's homespun .....	.40	70	14	26	26	24	31	26	20	29	26
9	Woolen tweed .....	.49	70	14	26	27	25	30	27	20	29	27
10	Women's all-wool blue serge ..	.40	60	12	28	39	21	34	39	17	32	39
12	Women's worsted serge ..	.41	57	11	29	38	20	35	38	17	32	38
14	Fancy woolen overcoating ..	.48	67	13	27	33	24	31	33	19	30	33
15	Women's worsted cheviot ..	.43	55	11	29	41	19	36	41	16	33	41
16	Covert .....	.56	65	13	27	28	23	32	28	19	30	28
17	Women's all-wool sacking ..	.55	68	14	26	27	24	31	27	29	29	27
20	Women's all-wool broadcloth ..	.59	67	13	27	30	23	32	30	19	30	30
21	Fancy woolen overcoating ..	.52	71	14	26	32	25	30	32	21	28	32
22	Men's blue serge .....	.58	55	11	29	34	19	36	34	16	33	34
23	Men's blue worsted serge ..	.55	60	12	28	38	21	34	38	17	32	38
25	Fancy cassimere .....	.64	69	14	26	29	24	31	29	20	29	29
27	Women's cheviot .....	.56	62	12	28	38	22	33	38	18	31	38
28	Men's fancy woolen suiting ..	.48	63	13	27	41	22	33	41	18	31	41
30	Fancy worsted .....	.82	67	13	27	30	24	31	30	19	30	30
32	Fancy fine woolen .....	.59	67	13	27	42	23	32	42	19	30	42
33	Covert wool .....	.80	67	13	27	30	21	31	30	20	29	30
34	Fancy worsted suiting .....	.55	55	11	29	46	19	36	46	16	33	46
36	Men's blue serge	1.29	72	14	26	23	25	30	23	21	28	23
37	Men's black clay worsted .....	.99	68	14	26	27	24	31	27	20	29	27
38	Fancy worsted suiting .....	.87	72	14	26	32	25	30	32	21	28	32
41	Black thibet .....	.82	65	13	27	24	23	32	24	19	30	24
42	Men's light weight blue serge ..	1.00	66	13	27	34	23	32	34	19	30	34
44	Woolen overcoating	1.24	71	14	26	24	25	30	24	21	28	24
45	Men's fancy half-worsted suit- ing	1.12	70	14	26	28	25	30	28	20	26	28
46	Uniform	1.29	75	15	25	22	26	29	22	22	27	22
47	Black unfinished worsted	1.08	66	13	27	34	23	32	34	19	30	34
48	Men's unfinished worsted .....	.96	58	12	28	36	20	35	36	17	32	36
49	Men's serge .....	.90	63	13	27	37	22	33	37	18	31	37
52	Silk mixed worsted	1.48	65	13	27	39	23	32	39	19	30	39
53	Men's unfinished worsted	1.45	51	10	30	42	18	37	42	15	34	42

2

100
90
80
70

to. The costs of producing worsted yarns were taken from the report on Schedule K and in those cases where costs were not given for particular counts, the costs of these were estimated on the basis of the costs given. The costs of cotton yarns (when a part of a sample) were taken from the Tariff Board's report on Schedule I.³¹ No costs of carded woolen yarns are given by the Tariff Board, but it is generally recognized in the trade that the conversion cost of these yarns in the United States is one half cent a cut and in the absence of anything better, this estimate has been used here.

These detailed explanations of Table 10 have been made for the purpose of being frank with the reader. Differences of opinion unavoidably arise in a subject as complicated as the one under consideration. There is no desire to force any conclusions on the reader and therefore the methods of computation are set forth plainly and the result left to the judgment of him who reads.

The Hill bill (known officially as the Payne bill), prepared by Congressman Hill of Connecticut, was a careful attempt to frame a wool bill based on the findings of the Tariff Board. It received the unanimous support of the Republican minority in the House, but was repudiated by the Republican senators. Table 11 shows the duties on woolen and worsted fabrics under the Hill bill and compares them with the compensation and protection required by the Tariff Board report.

The Hill bill provides that the compensatory duty on fabrics shall be levied only upon the "wool contained therein." This idea was not recommended by the Tariff Board, but it was generally in favor among the advocates of lower duties. It only in part cures one of the evils of the present law—that of excessive duties on cheap fabrics—since shoddy goods still pay the whole of the compensatory duty. A graded specific duty would without doubt be more equitable. Since it was adopted, however, by Congressman Hill, it is taken into consideration in Table 11. Column 3 shows six fabrics containing less than 100 per cent of wool and the compensatory duty in column 4 is calculated only on the actual wool content. Congressman Hill followed the recommendations of the Tariff Board both as to the amount of the compensatory duty³² and as to grading the ad valorem duties on cloth.³³ In

³¹ H. Doc. No. 643, 62 Cong., 2 Sess.

³² Report of the Tariff Board on Schedule K, p. 626.

³³ Ibid., p. 710.

Table 10 the total duty in cents under the Hill bill is calculated and then reduced to a percentage (column 8).

Columns 9, 10, and 11 in Table 11 show the compensation and protection required according to the findings of the Tariff Board. In finding the percentages in column 9 the Hill compensatory duties (column 4) were assumed to correspond with the recommendations of the Tariff Board, which is true with the exceptions of the six fabrics containing cotton. Column 10 is taken from column 7 of Table 10. When the percentages in column 8 are compared with those in column 11, it will be seen that the duties under the Hill bill are substantially in harmony with the findings of the Tariff Board.

The conservative Republicans of the Senate knew, as did anyone familiar with the situation, that a revision of Schedule K proposed by the majority of the Finance Committee had not the slightest chance of passage. Certain conservative Republicans, however, desired to put themselves on record and the Penrose bill was the result. In this bill a new classification of fabrics was adopted; dress goods were, as in the present law, put in a separate paragraph; and the compensatory duty was graded. Table 12 is a study of the Penrose bill as Table 11 was a study of the Hill bill, and, coming after the discussion of the latter, the former will be clear with a very few comments. Column 7 shows the total duty on each sample under the rates of the Penrose bill and, if compared with the findings of the Tariff Board in column 8, it will be evident that the rates in the bill are excessive.

When attention is turned away from the Penrose and Hill bills, in which the cloth duties are compound duties, to the La Follette, Underwood, and Compromise bills in which the cloth duties are ad valorem duties a new method of treatment must be adopted. The rates on raw wool and cloth in the La Follette bill were 35 per cent and 55 per cent respectively; in the Underwood bill 20 per cent and 40 per cent respectively; and in the Compromise bill 29 per cent and 49 per cent respectively. Table 13 is for the purpose of showing the net protection in per cent given to cloth by each of these bills and to compare this net protection with the protection required, according to the Tariff Board, to offset the difference in conversion cost between this country and England.

Column 2 in Table 13 gives the per cent the material cost in

each fabric is of the total cost, and is used as a basis for computing the compensatory duty under the respective bills. The net protection given by each bill is then determined by subtracting the compensatory duty in per cent from the actual duty levied on cloth by each bill and the result is compared with the needed ad valorem protection according to the computations which were made in Table 10. The method by which the table was constructed will be made clearer by an example. Of the total cost of sample No. 22, 55 per cent is material cost. The rate on raw wool in the Underwood bill is 20 per cent, and 20 per cent of 55 per cent is 11 per cent, the proportion of the Underwood duty on cloth required to compensate the manufacturer for the rise in price of his raw material, due to the 20 per cent duty on raw wool. The 11 per cent is then subtracted from 40 per cent (the Underwood duty on cloth) to obtain the net protection under this bill (column 4). The same method was pursued in making the computations for the La Follette and Compromise bills. If a flat ad valorem rate on cloth be admitted desirable, Table 13 seems to show that the La Follette rate of 55 per cent with 35 per cent on raw wool is substantially in harmony with the findings of the Tariff Board, although from a protection point of view 60 per cent would be more nearly correct. The other two bills are clearly too low.

It is stated in good faith by men intimately acquainted with wool manufactures in the United States that the industry cannot exist with anything less than a prohibitive duty. If this proposition be accepted, the rates on cloth in the Penrose bill can be defended; it is also true that a different method of calculation would have to be pursued in interpreting the statistics of the Tariff Board. It was assumed at the beginning of this article, however, that a competitive rather than a prohibitive tariff was to be framed and that the rates desired were simply to equalize competitive conditions for the American manufacturers on the basis of the existing economic organization. It is believed that the general level of rates on cloth in the Hill bill is defensible from this standpoint. The method of levying the compensatory duty in the Penrose bill is more commendable than that of the Hill bill. A carefully graded specific compensatory duty would remove the excessive duty on the cheaper fabrics and still preserve the desirable features from the protection point of view of specific duties.

Much useless debate would be prevented if men would consider their tariff theories more carefully. It is useless for a protectionist Republican and a tariff-for-revenue Democrat to debate the desirability of the rates in a particular bill; they should debate premises, not conclusions. The conclusions of this article, therefore, should be judged in the light of the premises laid down at the beginning. No one of the bills considered is desirable from all points of view. The Underwood bill may be desirable from the standpoint of the Democrats but undesirable from the standpoint of the protectionist. And so with each one of the bills. This point at least should be clear from this discussion.

Public men and economists have not sufficiently appreciated the services of the Tariff Board. These services were obscured by political animosities, aggravated by attacks made upon the board for personal and party reasons. He who wishes to pick flaws in the Tariff Board's report on Schedule K can do so with ease. Viewing its work constructively, however, it may be fairly said that the board did more for an honest, scientific revision than all the committee hearings and investigations which preceded it. However unsatisfactory its work may be in the eyes of some of its critics, the fact remains that its work is infinitely more satisfactory to the impartial observer than the work of the committees of Congress. Its faults are chiefly those of omission. It came to its work without a precedent in this country or abroad to guide it, and every step in the work presented difficult problems. When the time comes, as soon it will, for Congress to establish a permanent tariff commission, this commission will take up the work where the Tariff Board left it, and perhaps only then will be realized the worth of the public service of the members of the Tariff Board.

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REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Sociology in its Psychological Aspects. By CHARLES A. ELLWOOD. (New York: D. Appleton and Company. 1912. Pp. xi, 417.)

This is a good book with a misleading title. It should have been called "The Sociological Interpretation of Psychology." It presents evidence to support certain sociological theses but does not give the elementary facts needed for an unbiased judgment of the value of this evidence. The statements of those in one science about facts in another science are subject to many limitations. It is so easy to pick out what is favorable and to neglect other interpretations that great care is needed to prevent one-sided conclusions. Such care our author has not taken. It is hard to determine whether he has erred because of carelessness or dogmatism. He is careless if he failed to read widely before writing; he is dogmatic if with the full evidence before him he wrote as he did. The real issue is whether a sociological or an economic interpretation of psychology has the greater value, and yet the author does not seem to know that for two centuries economists have been striving to interpret psychic phenomena in harmony with economic facts. He apparently thinks that economic interpretation begins and ends with Karl Marx.

All economists and sociologists must know something of psychology and biology. The way, however, in which we come to this knowledge is a matter more of personal than of general interest. What a given sociologist knows about psychology is for him important, as it was important for me to discover what an economist could know about biology. I excuse my excursions in the biological field because at the time I wrote there were no books on biology emphasizing the facts needed by an economist. At present there is hardly a corresponding excuse for sociologists or economists to write books on psychology or biology. In recent years several texts have appeared amply meeting the needs of the student of social science. If a clear statement of the doctrine of evolution is desired, he can find it in Crampton's *The Doctrine of Evolution*; if he wishes correct information about the recent development of psychology, he can read Partridge's *Genetic Philosophy of Education*.

The tone of the book and the thesis of the author can be seen from the following passage. There are many similar ones showing that his attitude is a conscious one.

It cannot be admitted, however, that we can explain social organization in general, or social progress, in terms of economic development. A theory of progress, for example, in which the sole causes of social progress were found in economic conditions would neglect political, religious, educational and many other conditions. Only a very one-sided theory of society can be built upon such a basis. The sphere of economics is to explain the commercial and industrial activities of man from the standpoint of values and markets, and not to attempt to become a general science dealing with social evolution. This is now recognized by practically all economists of standing, and the only question which remains is whether economics is independent of sociology or whether it rests upon sociology.

If Dr. Ellwood had informed himself about the various economic theories of progress, he would not have made these statements. The probability is that he has read only the misleading statements in Professor Seligman's *Economic Interpretation of History*. Economists do not say that the causes of progress are in economic conditions, but that economic conditions give a measure of progress. By watching the changes that take place in the various activities of a nation, the observer can determine objectively the condition of the nation in a more accurate way than he can by any other known measure. The real issue is not whether economics precedes or follows sociology, or whether it is a part of or independent from it, but whether a given view of social progress is correct or incorrect. Each thinker has definite propositions which he believes can be proved, and he goes to the same field as his opponent for his proof.

To make this point clear, I shall state the order of progress as I understand it. Biology teaches us that the structures of organisms are difficult to alter. There is no valid evidence showing that the bodily (or nervous) structure of man has altered during the last five thousand years; if so, the source of progress must lie somewhere else than in organic change. The environment, however, is readily modified and in this way a measure of progress is secured. The earliest definite measures of environmental changes are the permanent improvements we call wealth. In contrast with this, the emotions of human beings are the hardest elements to alter and therefore give the least evidence of the changes we call progress. The next test of change is bodily function, and here

we find certain alterations slowly taking place that adjust men in their environment. Language is more flexible than function and its changes represent progress in adjustment more accurately than do changes in function. The fourth test is thought changes which are increasingly mobile, but still slow and indefinite. The fifth is wealth; the sixth is social surplus; the seventh is health; the eighth is culture; the ninth is the social sentiments. If the measures of progress are put in this order, the increasing mobility of the later ones becomes manifest and from them increasingly definite measures of progress are obtained. The psychological tests are not of much consequence because the emotions, while of supreme importance, are unchanged and do not therefore afford measures of progress. We get more objective measures as we pass along the series from structure through wealth to the social sentiments. The student should not, however, accept any one test as final, but getting evidence of progress in one field should check it up in other fields.

The economist prefers evidence that can be readily measured. This does not mean that he is a materialist, but that evidence objectively tested is better than indefinite measurements of psychic structure. All science tends to pass from the more indefinite but subjective facts to those objective enough to be measurable. An illustration of this is given by our judgments of the weather. The earlier man judged whether or not it would rain by the color of the setting sun or by the rings around the moon. To change from such evidence to the reports of the Weather Bureau indicates not a disregard of the aesthetic value of the color of the setting sun but an increasing regard for the next day's activity. The ring around the moon and a weather bureau report are simply two kinds of evidence brought to bear on a common end.

I am stating these facts not to discredit the work of Dr. Ellwood, but to contrast economic and sociological thought. The difference is not between a broader and a narrower science, but between definite propositions in a common field. Progress either comes through race struggle or it comes through coöperation. Whether the emotions or wealth give a better measure of progress is a question of evidence. Those who believe that wealth gives a better measure do not by that mean that emotions are unimportant; they merely mean that wealth is more objective.

This is the second proposition about which sociologists and economists differ. A third difference is a problem of origin. If

human society had a monistic origin then the pluralistic attitude so often held by economists is wrong. The reverse is true if in the end it should be proved that some type of pluralism is at the basis of human progress. The difference is again one of evidence, and not of the field in which economists and sociologists work. There is but one social science and its field is human progress. Mere existence is a physical fact, the explanation of which belongs to more elementary sciences. Social science is thus the science of human achievement. It is telic not descriptive, dynamic and functional but not structural. All social scientists are therefore in one field and have common data. They differ only as to evidence and methods.

Progress can be measured by organic changes directly seen, or by those reflected in consciousness; it can also be measured by environmental changes to which the name economic is given. Interpretations of progress thus fall under three heads: the biologic interpretation in terms of organic changes; the psychological interpretation in terms of feelings, emotions, and passions; and the economic interpretation in terms of the accumulated effects of objective modifications. The first two of these interpretations are emphasized by sociologists and the last by economists.

The decision to be made is not in relation to the *cause* of progress but as to its *measure*, and in measuring progress the sociologists mistake their opponents. It is not the economists who have proved that organic alterations are hard to make. They would gladly accept the doctrine of the inheritance of acquired characters if biologic facts permitted. It is the breakdown of this doctrine that has taken the importance from the biologic and psychic interpretations of progress. Doubt has thus been thrown on the proof of structural or emotional changes within the last 5,000 years. There seems to be as much proof of degeneration within this period as of evolution. If this is true, the only measures of progress are objective and economic. Sociologists who want other tests should direct their assaults against biology. Economists would welcome success in this attack, but they should be excused from using up their energies in what seems a hopeless task.

Dr. Ellwood's book cannot be regarded as a final statement of social doctrine. It is, however, one of the best books on sociology that has recently appeared. I regard it as the most important book that has appeared since Ross' *Social Control*. It shows evi-

dence of careful work and of great industry. Dr. Ellwood is the kind of man from whom more is to be expected. A man who states his theses boldly and defends them clearly may be wrong, but failure to him means reorganization of evidence from which new progress will come. I shall look forward with interest to Dr. Ellwood's next book and believe that it will be as much in advance of the present one, as this book is superior to any other he has published.

SIMON N. PATTEN.

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Cours d'Economie Politique à l'Usage des Etudiants des Facultés et Ecoles de Droit. Vol. I. *La Production, la Consommation et la Plus Grande Partie de la Répartition.* Vol. II. *La Fin de la Répartition et la Circulation Suivies d'un Appendice sur les Finances Publiques et d'un Appendice sur les Particularités Economiques de l'Egypte.* By GEORGES BLANCHARD. (Paris: Auguste Pédone. Vol. I, 1909; Vol. II, 1912. Pp. vi, 710; 907.)

In general form and method of treatment Professor Blanchard's *Cours* is very similar to the typical French *Manuel d'Economie Politique*. It is based upon the works of Beauregard, Cauwès, Leroy-Beaulieu, Colson, and Gide; and, as one might infer from this list, the prevalent tone is that of French optimistic liberalism, somewhat tempered at points by the criticism of Cauwès and others. German and American writers seem to be little known by the author, but Mill, Jevons, and Marshall are drawn upon. It is a merit of the *Cours* as compared with many French works that some attempt is made to digest the theories of the Austrian school. The author, of course, is opposed to socialism (to which he constantly refers) and to "solidarité."

Among the first general characteristics of the book to impress one are its encyclopedic character and its eclecticism. In its sixteen hundred pages it ranges over the whole field of pure and applied economics, excepting only public finance—and that subject is discussed in an appendix! Were it only indexed or arranged alphabetically, it would serve as a dictionary of political economy; and it would be the better adapted for this use from the fact that it presents a brief statement of rival theories on each point. The encyclopedic character of the book is heightened by its arrangement. The order of topics is modified by the exigencies

cies of the two year's course in a French faculty of law. It must proceed from the easy to the difficult and cover the whole field as it proceeds. The first volume covers production, consumption, and part of distribution—in that order; and the second is devoted to distribution and "circulation," including value. Thus it is a weakness of the presentation that logical cause-and-effect relations are too little observed in the arrangement. For example, under "circulation" the order of chapters is: (1) value, (2) exchange, (3) markets, (4) transportation, (5) money, etc.

As it is impossible to examine the whole of so comprehensive a work, the theory of value may be taken as a sample. Value is defined as a "degree of desirability." But, we are told, this degree manifests itself in two ways: "value in use" (based on utility), and "value in exchange." The reader is left to infer that the two are coördinate phases of desirability, for no causal or sequence relation between them is indicated. The author states that value in use is more precise and general than value in exchange; because, for instance, a medical book and a novel may have the same exchange-value, but may have different values in use. Might not one equally well observe that two goods which have the same value in use may have different prices, and conclude that exchange value is the more precise? On page 221, we are told that value in exchange is a quality of services as well as of commodities; but on the next page it appears that a thing must be material in order to have exchange-value. On the whole the theory presented is eclectic, and not very acutely reasoned. Simply, groups of buyers and sellers come together and by competition are led to exchange at a market value which allows the greatest possible number of exchanges, and which tends to coincide with a normal value fixed at the cost-of-production level. The foregoing is perhaps typical of the depth to which the author goes in theory.

Whatever one's judgment as to the book's merits on theoretical points, its value as a compendious treatment of applications and practical problems is considerable. A large amount of space is devoted to agricultural, labor, transportation, trust, and monetary problems, and in most respects the discussion appears very satisfactory. An interesting appendix takes up some special economic problems of Egypt.

In the reviewer's opinion, Professor Blanchard's eclecticism brings good results at one point, at least. He describes the

entrepreneur as one who assumes those risks of the business which are due to the fact that he (the entrepreneur) (1) combines labor and capital in order to direct their application to land, (2) owns the resulting products, and (3) endeavors to sell them for more than the expenses in wages and interest. Thus, the entrepreneur affords a certain service, runs a certain risk, and has his special advantages. These points, however, are inseparable; and profits covers all.

It is also of interest to note that the part on distribution is *begun* with chapters on socialism and on property rights. Long ago it was suggested by Rodbertus that the most logical way to discuss distribution would be to state the desiderata of a good system before describing the existing imperfect one.

Another good feature of the book is its emphasis of the close relation which exists between law and economics. Economics is defined as the study of the relations which exist among men living in society—in so far as men have for their objects their own well-being. This emphasizes the true social point of view: not all means of gaining wealth are treated, for some are forbidden by conscience and others by law. In a word, some are anti-social.

As one turns from the perusal of a manual like that under discussion, the question occurs, Why do we have so few such works in America? Taussig's recent manual is the only work which can be compared with it. Surely there would be room for a treatise covering the whole body of knowledge on economic matters, stating and weighing various theories, and bringing out the numerous qualifications which have to be made in order to approximate the whole truth. It must be helpful to an author to try to state and classify all variations and qualifications, and to weigh and synthesize different theories; and many readers would find it helpful.

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Source Book in Economics. Selected and Edited for the Use of College Classes. By FRANK A. FETTER. (New York: The Century Company. 1912. Pp. 385.)

Seven years ago, at the Providence meeting of the American Economic Association, the success of a prospective attempt to collect a useful volume of collateral readings for the elementary course in economics was gravely doubted. Professor Bullock's

Selected Readings very soon appeared and instructors at once recognized the advantage of having easily available for the student body not only illustrative extracts from original sources, but also such classic passages as Adam Smith's "pin" chapter and Bastiat's "the seen and the unseen" in capital accumulation. Professor Fetter's *Source Book* is the second attempt to collect, in a formal volume for general use, material illustrative of economic principles and structure. The readings in these two volumes, although taken from different sources in every instance, are of similar character, except that the latter gives no space to economic history, presents a somewhat less proportion taken from secondary sources, and naturally contains material from more recent developments. The two conveniently supplement each other and constitute the total of publications of this sort in English for general use; but there are excellent bulletins issued from time to time by the Department of Political Economy of the University of Chicago, and a volume, likewise for private use, by Professor F. M. Taylor.

The forty-three different selections which comprise Professor Fetter's volume are arranged under seven headings as follows: Markets and Prices; Wealth and Its Uses; Capital and Investment; Labor and Population; Costs, Profits, and Monopoly; Private Incomes and Social Welfare; the State and Industry. Those familiar with the editor's *Principles of Economics* will recognize in these headings the order of topical arrangement in that textbook. The readings are evidently, and properly, intended to be rendered easily available for use in connection with it; but instructors making use of other texts will find no difficulty in choosing appropriate sections for their students. More than two thirds of the selections are culled from a wide range of public documents and reports of governmental and voluntary organizations, while but very few are taken from the ordinary secondary sources. Each extract is designed to correspond with a principle or a concept of the science. Elasticity of demand is thus given the touch of reality to the student, by means of material taken from H. C. Taylor's bulletin of the University of Wisconsin Agricultural Experiment Station on price variations in food; depreciation of plant as an element in cost, by means of a few paragraphs from the Tariff Board's report on cotton manufactures; general wages in given classes as affected by cost of living, by means of extracts from a bulletin of the Bureau of Railway Eco-

nomics, and from Jenks and Lauck's *The Immigration Problem*; and so on. The readings thus present concrete facts lying beneath the more important concepts and principles, and illustrate them in an interesting and illuminating manner. Brief editorial notes precede each selection, making more certain the student's grasp of the chief point at issue.

The beginner in economics is ordinarily in much need of enthusiasm for his subject and of information on the organization of industrial society. Therefore, whether a class is composed of twenty or fewer students and the method of drill in reasoning is adopted by the instructor; or of more than twenty students and the method of emotional appeal is perforce predominantly employed, a reading book for use in connection with the text on principles should accomplish at least two results: it should give the student, within the space limits permitted, the widest possible knowledge of economic structure; and it should help to give him a livelier interest in the analysis of principles than can be given by the study of the usual textbook alone. Judged by this test Professor Fetter's volume deserves warm commendation.

Perhaps the ideal book of supplementary readings for the beginning course would be one in which illustrative matter, gathered from a variety of representative sources, is recast, rewritten, and "adapted" to the purpose in hand so as to present a systematic whole. Such a book, however, might not repay the editor for the expenditure of his time and energy since newer and fresher sources of material are constantly produced, and the work would need to be done over at frequent intervals. The bulletins issued by the University of Chicago show a tendency in the right direction for selections are, in some instances, "adapted," *i.e.*, to some extent rewritten, in order to give them more telling effect. When these bulletins take their final form in a volume available for general use, an acceptable additional facility will be made to those now at hand for making the elementary course a still more important feature of the curriculum.

DON C. BARRETT.

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NEW BOOKS

DIETZEL, H. *List's System und die nationale Wirtschaftspolitik.*
(Tübingen: J. C. B. Mohr. 1912. Pp. iii, 52. 2 m.)

FISHER, I. *Suggested problems for teachers for use with elementary*

principles of economics. (New York: Macmillan. 1912. Pp. 4, 34. 50c.)

FRIDRICHOWICZ, E. *Grundriss einer Geschichte der Volkswirtschaftslehre.* (Leipzig: Duncker und Humblot. 1912. Pp. vii, 267. 6 m.)

GRAZIANI, A. *Teorie e fatti economici.* (Torino: Bocca. 1912. Pp. 499. 6 l.)

HELLWIG, E. *Die Theorien über den Zusammenhang von Produktion und Kaufkraft.* (Berlin: Puttkammer und Mühlbrecht. 1913. Pp. 101. 2 m.)

KELLER, F. *Unternehmung und Mehrwert.* (Paderborn: F. Schöningh. 1912. 1.50 m.)

LADENTHIN, E. *Die Entwicklung der nationalökonomischen Ansichten Fr. Lists von 1820-1825.* (Vienna: C. Konegen. 1912. 3.50 m.)

LEVY, H. *Die Grundlagen des ökonomischen Liberalismus in der Geschichte der englischen Volkswirtschaft.* (Jena: Fischer. 1912. 3.50 m.)

MARTELLO, T. *L'economia politica et la odierna crisi del darwinismo.* (Bari: G. Laterza. 1912. Pp. xii, 530. 5 l.)

NOGARO, B. *Eléments d'économie politique: production, circulation.* (Paris: Giard et Brière. 1912. 5.50 fr.)

NOEL, O. *Principes d'économie politique et sociale. Cours professé à l'école des hautes études commerciales.* Vol. I. *Notions fondamentales. Production des richesses.* Vol. II. *De la circulation des richesses.* (Paris: Pédone. 1912. 18 fr.)

PATTEN, S. N. *The reconstruction of economic theory.* (Philadelphia: The American Academy of Political and Social Science. 1912. Pp. 99. §1.)
To be reviewed.

PIERSON, N. G. *Principles of economics.* Vol. II. Translated by A. A. Wotzel. (London: Macmillan. 1912. Pp. 670. 10s.)
To be reviewed.

PIGOU, A. C. *Wealth and welfare.* (London: Macmillan. 1912. Pp. xxxi, 493. 10s.)
To be reviewed.

SILBERSTEIN, F. *Dogmenkritische und systematische Versuche zur Lohntheorie.* (Munich: J. Lindauer. 1912. 2 m.)

SOMBART, W. *Studien zur Entwicklungsgeschichte des modernen Kapitalismus.* Vol. I. *Krieg und Kapitalismus.* Vol. II. *Luxus und Kapitalismus.* (Leipzig: Duncker und Humblot. 1913. Pp. viii, 220; viii, 232. 6 m. each.)
To be reviewed.

STEFFEN, G. F. *Die Grundlage der Soziologie*. (Jena: E. Diederichs. 1912. Pp. 183. 3 m.)

TILLE, A. *Lujo Brentano und der akademische Klassenmoralismus*. (Berlin: Otto Elsner. 1912. Pp. 174. 2 m.)

WALSH, R. *The principles of industrial economy*. (London: King. 1912. Pp. 272. 6s.)

WARD, L. F. *Glimpses of the cosmos*. To comprise twelve volumes. (New York: Putnam. 1912. \$2.50 each.)

WOOD, G. C., compiler. *Dr. Chalmers. The opinions concerning political economy and social reform*. Compiled from his writings. (London: Douglas. 1912. Pp. 118. 1s.)

Economic History and Geography

The Evolution of Industry. By D. H. MACGREGOR. Home University Library, No. 28. (New York: Henry Holt and Company. 1912. Pp. 254. \$.50.)

To "describe the recent changes which have given us the present condition of the working classes," is the author's purpose. Thus he hopes to "help to explain the unrest which is so great a feature of this critical time," and, while stopping at the threshold of socialism, upon which Mr. J. Ramsay MacDonald has already contributed a volume to the Library (cf. AMERICAN ECONOMIC REVIEW, vol. I, p. 628), to make his study a way of approach to that larger question.

The key to industrial evolution in the nineteenth century, in which alone Professor Macgregor studies it, he finds in the two methods by which invention has met the pressure of growing population upon land which does not grow: in the discovery of resources, and in the discovery of processes—of new appliances, of new skill, and of new organization which has itself resulted in large measure from new appliances and from skilled specialization of laborers. How this has come about is the subject of the third chapter, which gives an admirable survey of the reasons why "the great feature of the last quarter of the century is the extent to which politics become concerned with the social results of industry."

In chapter 4 certain root problems—education and child labor, women in industry, the minimum wage—are taken up, chiefly through the medium of recent British legislation. Therein Professor Macgregor finds three phases of "the modern attitude." The first is the dawning recognition in industry, as long before

in politics and in law, of personal right and of personal value. "When 'the case of John Brown unemployed' is felt to create the same need for redress as the case of 'Captain Dreyfus wrongly condemned,' the industrial standard will have been placed on the same level as the standards of law and civics." The second is the recognition that in the health, the intelligence, and the cheerfulness of its workers the nation has an "internal" wealth quite as worthy legal security as its "external" wealth in material property. And this security is afforded, in part at least, by the third modern idea, that of minimum conditions.

The system itself in which industry has come to be organized to distribute the national dividend among those who share it is described and criticized in the next four chapters: The Question of the System, The People and the Land, Competition and Association, and Types of Industrial Government. Professor Macgregor concludes that throughout the century "the relation of employment and the development of competitive enterprise imply the government of the great field of national labour by those who are not under the direct industrial control of the people." At present, through the trust movement, forces are shaping themselves in the largest part of the field of industry, towards completer results in the way of non-democratic leadership; and the history of legal attempts, in England and America, to prevent this "has not been a distinguished one." Whether this non-representative manner of leadership shall continue to regulate the policy by which goods are made and marketed, and the political power of the people shall be further used merely to redistribute the surplus gains of industrial leadership, or whether industrial government shall be made directly democratic, is the question to which the concluding chapter is addressed.

Limitation to two hundred and fifty duodecimo pages has compressed Professor Macgregor's volume to a high degree of density. It is full of facts and stuffed with ideas. No abstract could do it justice. Almost it produces the impression of being itself an abstract. Many volumes of the series in which it appears are easier reading; few will better repay study. As an introduction it may be found pretty stiff. But the more knowledge of the subject a reader brings to this book, the more highly will he appreciate the author's thoughtfulness and insight.

CHARLES H. HULL.

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Changing America. By EDWARD ALSWORTH Ross. (New York: The Century Company. 1912. Pp. 236. \$1.20.)

The reader of *Changing America* must not expect the same luminous and comprehensive consideration of the course of American social and economic transformation as he obtained of the Chinese in Mr. Ross' *Changing Chinese*. The more recent book consists of a number of occasional essays or addresses about different phases of modern American life, which are pulled together partly by an introduction and partly by some consistency of subject matter. The separate essays contain the results of much shrewd observation of contemporary tendencies. The author points out, for instance, that the worst obstacle to peace and disarmament consists in the varying birth-rates of different countries. Or again he remarks that the prevailing political radicalism in this country, unlike that of the nineties, is "no frothing up of economic distress." The reader will be interested throughout by the citation of many interesting and sometimes inaccessible facts, by the sense of the author's close contact with the realities of contemporary American life, and by a liveliness of phrasing and epithet that sometimes goes to extremes. He might well put the book down, however, with some disappointment due to the fragmentary and frequently uncritical treatment of the material, but with the hope that some day Mr. Ross will give to the public that more systematic account of the newer United States, which he is so well qualified to write.

HERBERT CROLY.

England's Industrial Development. By ARTHUR D. INNES. (New York: The Macmillan Company. 1912. Pp. xvi, 374. \$1.60.)

An Introduction to English Industrial History. By HENRY ALLSOPP. (New York: The Macmillan Company. 1912. Pp. xl, 151. \$.60.)

The remark of Mr. Innes that there is no superabundance of brief guides through the intricacies of English industrial history is unquestionably true. His work and that of Mr. Allsopp, both bearing the imprint of 1912, do something to relieve the situation. The plan of the first of these books is to divide English history into three periods, the Middle Ages, the Mercantile Period, extending to 1763, and the Period of the Industrial Revolution, extending to the present. The field in which the author is most in-

terested is indicated by the fact that the last division is almost as long as the other two together, though the period of time it covers is so much less. "All good things are three," and the author finds a threefold support for this division into three periods. The first is an agricultural period, the second maritime, the third manufacturing; the first is occupied with the consolidation of a nation, the second with the acquisition of an empire, the third with the organization of an empire; from the theoretical point of view, the second and third at least are marked by the prevalence respectively of the mercantilist and the individualist conception of the state. Accordingly in each of these three periods an account of political occurrences and an analysis of dominant economic theories precedes the description of economic institutions and the narrative of economic changes.

Doubtless we should be grateful for any thread to lead through the labyrinth of history, but much of this seems somewhat fanciful, and in the actual working out things often refuse to be so systematically classified. Historical phenomena in this narrative frequently either appear more than once, or, as in the case of colonization and the continental system, appear where we should hardly have looked for them. However, the actual facts of industrial history are told in Mr. Innes' book with clearness, moderation, interest, and a fullness quite remarkable for a book of only 368 pages. This compression without loss of lucidity is attained by dealing in statements rather than discussions. Where there is a profound difference of opinion among professed scholars the author has stated both views clearly, and frequently accompanied them with an alternative statement of his own, based perhaps rather on an eclectic process of choosing what is most reasonable than on a new and independent examination of the sources. Sometimes this leads to a somewhat subjective treatment of history and sometimes to actual mistakes, as in his suggestion that the Tudor legislation against enclosures may have been inspired by the *Utopia*, and his statement that this legislation "began with the inquisition or inquiry instituted in 1517." Two important laws against enclosures were passed in 1488, 4 Henry VII, chaps. 16 and 19; and two more in 1515 and 1516, 6 Henry VIII, chap. 5, and 7 Henry VIII, chap. 1. The *Utopia* was not published until the last of those years. The inquisition of 1517 presupposes familiar legislation on the subject with which it deals, and was directed toward the discovery of violations of these laws.

Mr. Innes seems to underrate the completeness of the disappearance of the ideal of individualism in recent times; but that is a matter of personal judgment. Just what economic or social theories are at any time dominant is difficult to determine. There is far less clearness and far less homogeneity in men's ideals than we are apt to imagine; theory has followed rather than preceded both practical action and legislation, and the whole influence in social history of generalized conceptions has probably been less than is attributed to them in this and most other books.

It is significant that the last five chapters in this book have nothing to do with its title, strictly interpreted. Legislation on hours of labor and strikes for the recognition of trade unions are certainly not matters of industrial development. As a matter of fact the condition of the mass of the people has forged to the front as the great question of our age, and has superseded interest in the actual processes by which wealth is created or exchanged. In the multiplicity of occurrences and complexity of social movements during recent times the author has preserved clearness, fairness, and good judgment; and we can only echo his pious hopes that the general reader may enjoy the book as much as the writer and the reviewer have.

Mr. Allsopp's book is still shorter and more elementary than that just described. In fact it is hard to picture the class that needs so much "writing down" to. Nevertheless if the whole story is to be given in 150 pages, simplicity and vivacity are no mean virtues. But sometimes concreteness and vivacity may be obtained at the expense of scholarship, even of truth. Mr. Allsopp's description of the tenants of a manor in the time of William the Conqueror meeting to cast lots for the possession of the strips in the open field, is a quite fanciful and quite incorrect picture. We know absolutely nothing of the origin of the system of scattered strips. That it was a device for attaining fairness of division is purely a guess; that the open field acres were distributed annually by lot during the Norman period is purely a fiction. The supposed conversation in a process of barter between a peasant and a blacksmith is almost equally inconceivable. The "barter stage" is probably a myth. There is not a single contemporary statement of its existence in mediaeval England. What preceded exchange through the medium of money was either a state of communal ownership, of possession of only what one himself made, or of no possessions at all of an exchangeable kind.

The latter part of the book is less full of mistakes, and contains much that is true, wholesome, fair-minded, and above all, bright and interesting. But it is certainly not necessary that simplicity should be accompanied by such carelessness of statement, or that brevity should make its appeal to such a juvenile audience.

E. P. CHEYNEY.

University of Pennsylvania.

Two Select Bibliographies of Mediaeval Historical Study. I. A Classified List of Works Relating to the Study of English Palaeography and Diplomatics. II. A Classified List of Works Relating to English Manorial and Agrarian History from the Earliest Times to the Year 1660. By MARGARET F. MOORE. With a preface by HUBERT HALL, and a description of the medieval historical classes at the London School of Economics. (London: Constable and Company. 1912. Pp. 185.)

The bibliography of manorial and agrarian history takes up the larger part (pp. 71-185) of this book. Allowing for repetitions, there are about a thousand entries in this section. Compared with Miss Davenport's *Classified List* of 1894, on the same subject, the present bibliography has more than twice the bulk; and though it differs by including modern works, a large part of the increase falls in the section of published sources. The student of the subject will be grateful for the more efficient means of investigation now put at his command. He will miss the somewhat detailed classification of Miss Davenport's *List*; the present bibliography, after brief sections on manuscript collections and bibliographies of printed works, lists publications in only two main classes, sources and modern works, subdividing each class into collections, single works and periodicals. The justification of such a course appears, however, in the composite character of many of the publications listed; and as the editor, under each entry, notes the chief features of the contents, when they are not indicated by the title, and has provided an excellent index, by author or title (lacking in Miss Davenport's *List*), as well as place, and also by class (accounts, customals, extents, maps, etc.), she deserves credit not only for extending the work of her predecessor but also for improving the means of utilizing it.

A cursory examination of the titles listed reveals no serious

omissions. Jessopp's *Coming of the Friars* might well have been included, and doubtless there are other examples of the failure to include appropriate material. In the reviewer's opinion the bibliography needs compression more than expansion. The editor should not list Gibbins' *Industry in England* if she is not prepared to give the titles of other and better books of the same class (Warner, Cheyney, etc.). The books on continental agrarian history might well be omitted altogether, for the selection from them appears to be perfectly arbitrary. The list includes Dareste de la Chavanne and Doniol, and omits See; it includes Fustel but not Glasson or Flach; it includes Seeliger but omits reference to Lamprecht, Inama, Wittich, etc. The editor had to face a difficult question in determining whether she would include general constitutional and legal histories of England, and may have done wisely in deciding against them; but she can scarcely justify her course when the list omits Stubbs and Pollock and Maitland, but includes Waitz and Brunner; when it omits Kemble but includes Maurer.

Miss Moore is not consistent in her bibliographical practice. Occasionally she gives the place of publication of a book, and notes the fact if it appeared as part of a series; as a rule the bare date of publication is the only information offered. The reviewer holds this to be a serious departure from good bibliographical usage, and must express the hope that it does not represent a settled policy to be followed later by contributors to the series of bibliographies of the London School of Economics. In other respects editor and publisher have done their work well; misprints noted (in titles 60, 710, 798, 845) are of trifling importance.

CLIVE DAY.

Yale University.

La Toile Peinte en France au XVII^e et au XVIII^e Siècles: Industrie, Commerce, Prohibitions. By EDGARD DEPITRE. (Paris: Marcel Rivière et Cie. 1912. Pp. xvii, 271. 9 fr.)

Students of economic history have long been familiar with the efforts made by various European states, in the seventeenth and eighteenth centuries, to protect the old established domestic manufactures of wool, linen, silk, etc., against the growing vogue of East Indian textiles. Depitre has investigated a longitudinal section of this field, and in his book presents the first compre-

hensive study of France's prolonged experiment, 1686-1759, in prohibiting the importation of Indian calicoes, the manufacture of domestic imitations, and the use of either.

The phrase *toile peinte* was originally applied to the hand-painted cotton fabrics which were brought to Europe by the various East India companies. The name was strictly accurate, for the colors were put on with the brush. But it was soon given—presumably by the enterprising manufacturers—to printed imitations, where the color or colors were put on the white cotton fabric with wooden moulds, applied by hand. The fabrics of this latter sort are the calicoes we are familiar with. It thus happens that *la toile peinte* may mean either the genuine *indienne* or the printed calico which has supplanted it.

The first prohibitions in France forbade the importation and use of Indian or printed calicoes, and also the printing of calicoes or other fabrics. Mercantile theories will explain the ban upon importations. The checking of the nascent domestic manufacture rested, in the main, upon the pressure the old manufactures were able to bring to bear upon the government, upon the crudeness of French technique in printing (which made successful competition with the Indian calico improbable), and, finally, upon the belief that since France set the fashions for the world she could, by abandoning the use of *toiles peintes* at home, discredit it abroad, and thus increase the foreign demand for her older textile manufactures.

Depitre devotes seventy pages to tracing and briefly accounting for the mutations of repressive legislation from 1686 to 1748: "il faut voir comment, soit l'objet, soit la portée des règlements successifs a souvent varié et quels retours curieux a subi la législation prohibitive. . . . Cette première tâche était facile: elle ne demande qu'un peu de patience" (p. ii).

The enforcement of the prohibitions proved to be impossible. A few of the more prominent reasons may be set forth here. Special privileges exempted Marseilles from their operation; the penalties were so high that the judges would not enforce them; the authorities did not dare to prosecute ladies of high degree, who found that the great attractions of the forbidden fabrics were made irresistible by the very fact that they were forbidden; the underlings of the law, the *gâpians* (who are so vividly depicted in Funck-Brentano's *Mandrin*), were wretchedly paid and corruptible. In a word, "gênée par mille obstacles, la répression n'a

jamais été exacte que momentanément et localement: d'une façon générale, la liberté d'user de la toile peinte a toujours été suffisante pour alimenter un important commerce clandestin et une contrabande active" (p. 122). The profits of the smugglers were so great that they could suffer the capture of two thirds of their goods and still prosper. The risks of capture were so slender that they were covered by an insurance of 10 per cent (p. 136).

After 1740 the government rapidly abandoned any effort at real enforcement of the laws and soon agitation for repeal began. Perhaps the most illuminating part of the book is that which presents, with copious extracts, the battle of the pamphlets and the press for and against repeal. The partisans of the old manufactures formed a secret cabal, and furnished a standardized petition of grievances, as it may be called, by the use of which, from all over France, the government was inundated with memoirs showing a remarkable unanimity of opinion against the *toiles peintes*.

The abandonment of repression was due in part to its failure and to the growth of laissez faire ideas, but among the other coöperating causes the author emphasizes the role played by the improvement of printing technique. The foreigner had discovered how to print attractive and durable calicoes, and the French "surprised their secrets."

The final chapter of the book sketches the development of calico manufacturing after the ban was lifted in 1759, and the oscillations of legislation down to the outbreak of the Revolution.

The book is based upon a wide use of unprinted and printed materials; the bibliography covers pages ix to xvii. A comparison with the defective treatment of the subject in Levasseur's last volume (*Histoire du Commerce de la France*, vol. I, pp. 497-498) indicates sufficiently the worth of Depitre's labors.

G. C. SELLERY.

University of Wisconsin.

L'Abbé de Saint-Pierre: l'Homme et l'Oeuvre. By JOSEPH DROUET, (Paris: Librairie Ancienne Honoré Champion. 1912. Pp. viii, 397. 10 fr.)

M. Drouet's comprehensive monograph on the seventeenth-century abbé, academician, philanthropist, and "apothecary of Europe," as his contemporaries styled him, is a thorough and

workmanlike achievement, and will doubtless supersede Goumy's and de Molinari's studies as the definite account of the man and his work. The author has an abiding enthusiasm for the industrious old dreamer—whom he endeavors to portray as less of a dreamer and more of a practical opportunist than popular tradition has recognized—but he retains throughout his sense of proportion, and gives a very discriminating estimate of the abbé's place in history. We follow the young Norman through his Jesuit schooling, his ardent pursuit of science in Paris, his favor at court and appointment as almoner to Madame, his election to the Academy through Mme. de Lambert's favor and his expulsion from it—nothing in his life as academician becoming him like the leaving it—on account of his mild criticism of Louis XIV. With the details of his life, or with the traits of character that led to La Bruyère's famous caricature of him as Mopse, most unfortunate of bores, or with his well-known project of universal arbitration and his schemes for the reform of the government of France, the economist is not directly concerned. More pertinent is his plan of tax reform, based on personal declaration of income and minute classification according to source, adopted with varying success in Picardy and Limoges and other provinces of France, and undoubtedly influencing Turgot. His writings on the reform of the system of state loans, on chartered companies, on road betterment and on poor relief show throughout capacity for detailed and ingenious working out of other men's general ideas, and entitle him to a modest place among the forerunners of the physiocratic school.

O. D. SKELTON.

Queen's University, Kingston, Ontario.

Le Facteur Economique dans l'Avènement de la Démocratie Moderne en Suisse. I. L'Agriculture à la Fin de l'Ancien Régime. By WILLIAM E. RAPPARD. (Geneva: Georg & Co. 1912. Pp. 235.)

In the form in which it reaches us this book is but part of a large design. The author has planned to study the industrial revolution and the rise of the democracy in Switzerland, in the first half of the nineteenth century, in relation to their historical causes and their reaction on each other. Diverted from his work by the call to an American university, he has published an instalment of the whole work, an admirable monograph on Swiss

agriculture about 1800. The first chapter describes the technical and economic conditions affecting the chief products of agriculture; a second describes the organization in regard to land tenure and leadership; and a third describes the feudal charges on agriculturists, and discusses their economic, social and political effects. The book is based on an imposing array of printed sources (pp. 215-230), and also on manuscript material from the federal and provincial archives. A tendency to grandiloquence appearing in the more general passages does not impair the practical quality of the bulk of the work, which is executed with a judgment and precision that testify to excellent scientific training, and give good promise for the future.

Swiss agriculture at the end of the old régime was marked by the relative importance of the pastoral element compared with the arable, and by the predominance of small peasant properties. The proprietors were often in debt, and labored generally under feudal charges, of which the oppression was felt more keenly as the cultivators began to produce for the market, and sought to improve their methods of production. The opposing interests of debtor and creditor, of country people and city people, roused the peasants to a consciousness of class, and made them ripe for a revolutionary movement, when this began among the enlightened members of the city population.

In this substantial book the author has made a mere beginning on the comprehensive project, which would include similar studies of Swiss industry and trade, social classes, and social and political movements. We hope the project may be continued and completed.

CLIVE DAY.

Die schweizerischen Industrien im internationalen Konkurrenz-kampfe. By DR. PETER HEINRICH SCHMIDT. (Zurich: Art. Institut Orell Füssli. 1912. Pp. 297. 6 m.)

In the first part, the author reviews in a suggestive rather than in an exhaustive and comprehensive way the geographic location of Switzerland, its natural resources, its laboring population, its capital and its importations of large quantities of raw materials and of coal. He also discusses the influx of foreign workmen. Dr. Schmidt views the latter with apprehension; however, he expresses the conviction that the tendency towards large-scale

production will be checked, thus dispensing with the necessity for drawing upon foreign unskilled labor. The Swiss have succeeded because of their intelligent specialization where quality of the work counts. Natural conditions surrounding their manufacturing activity prevent them from underselling; therefore their competitive strength will remain, as it has always been, in their characteristic workmanship.

Part II deals with the struggle for markets; here the author reviews the leading Swiss industries, those producing for domestic consumption and those relying mainly upon export trade; he gives a brief history of each industry, shows its present status and forecasts its probable future. The Swiss conquest of the foreign markets has been due less to governmental aid and concerted action than to individual enterprise.

Throughout the book Dr. Schmidt devotes much attention to an enunciation of the principles of theoretical economics and of economic geography. At times his reasoning seems to be influenced by his desire to prove his case; thus, on page 106 he makes the unqualified statement that the differences in the cost of production between various countries are due mostly to differences in the scale of wages, the wage representing the greatest item of productive cost; on page 186, discussing the same problem, he enumerates the many variables which enter into the valuation of a finished commodity and finds some of these unsusceptible of a quantitative analysis; on page 267 he admits that a low wage and a low standard of living denote a lower efficiency of labor; in the case of high grade products there is little to fear from the competition of those countries where the laborers are poorly paid. The author is of the opinion that the industrialisation of such countries as formerly produced only raw materials should be welcomed by the Swiss; it means the increase of their purchasing power and a better outlet for Swiss products.

The book is lucid in style and holds one's attention. It is to be regretted that, in his desire to be of interest to the general reader, Dr. Schmidt omitted from his text such data (statistical and other) as would have shown the means by which he arrived at most of his conclusions, and would have given a more precise knowledge of Swiss commerce.

SIMON LITMAN.

University of Illinois.

Zur Frage des Ursprungs der mittelalterlichen Zünfte. By WALTHER MÜLLER. *Leipziger historische Abhandlungen, XXII.* (Leipzig: Quelle und Mayer. 1910. Pp. xii, 92. 3.20 m.)

This study, a Leipzig doctoral dissertation, written under the direction of Seeliger and Doren, is much above the usual standard of its class. The author, after a survey of the various theories about the origin of the craft gilds, goes again over the ground covered by his predecessors, beginning with the *Capitulare de villis*, to determine the status and organization of the industrial class in the early Middle Ages, and seeks then to demonstrate the origin of the craft gilds from manorial groups (*Aemter, officia*), organized under masters in this early period. The author ranges himself, therefore, with those who adhere to the "Hofrechtliche Theorie," and places himself in opposition to the followers of Von Below, who assert that the gilds arose in the independent association of free industrial laborers for the exercise of market monopoly.

Curiously enough, almost simultaneously with the appearance of this study, a student of Von Below published one similar to it (Wilhelm Gallion, *Der Ursprung der Zünfte in Paris*, *Abhandlungen zur mittleren und neueren Geschichte*, herausgegeben von Von Below, etc., Heft 24), in which he drew from a portion of the same material absolutely contradictory conclusions. The present condition of the problem is well illustrated by this situation. Müller adduces evidence, more or less plausible, of organization of dependent artisans in the early period, argues that the local grouping of artisans made some organization natural and necessary, and believes that Strassburg furnishes an example of continuous development from manorial "officia" to the later gilds. Too often, however, the significance of his texts depends upon the meaning which he reads into them, and of a contrary interpretation he says simply that "it must be rejected." The followers of Von Below have an advantage in that the formation of gilds by free association is an uncontested fact of the later period, and they challenge the advocates of manorial origins to show the slightest difference between these and the earliest gilds.

The best part of Müller's work is that in which he analyzes the position of the early class of artisans, and shows that the same man could be unfree in that he was a manorial dependent, while economically he was free in the sense that he could devote a con-

siderable portion of his time to independent production for the market. It seems highly probable that investigators have made their categories too narrow and artificial, and that later studies will show the gilds to have originated neither in freedom nor in unfreedom, pure and simple, but in a somewhat complicated mixture of the two. The past has proved, more than once, that a primitive organization has appeared to us simple because we have known so little about it.

CLIVE DAY.

Yale University.

Randbemerkungen zu Werner Sombart's "Die Juden und das Wirtschaftsleben." By M. STECKELMACHER. (Berlin: Verlag von Leonhard Simion Nf. 1912. Pp. 63. 1.20 m.)

This is one of the large number of reviews of Sombart's work, which was itself noticed in the March, 1912, issue of this REVIEW (pp. 81-84). It seems, with one exception, noted below, to be the only review which has appeared in separate book or pamphlet form, though at least one has assumed even larger dimensions. Dr. Steckelmacher addresses himself chiefly to refuting Sombart's onslaught on the Jewish race and religion, contained in parts II and III of his work, entitled "Qualifications of the Jews for Capitalism" and "Significance of the Jewish Religion for Economics," though he also assails as exaggerated or inaccurate some statements in the earlier section, "Part of the Jews in the Development of Economic Society."

Among the other eminent scholars who have discussed the Sombart volume are Moses Hoffmann in his *Judentum und Kapitalismus* (Berlin, 1912), reprinted from *Jüdische Presse*, May 18, 1911 *et seq.*; Bondi, in *Jahrbuch der Jüdischen Literatur-Gesellschaft*, vol. VIII, p. 1910, *Die wirtschaftliche Tüchtigkeit der Juden*, pp. 378-431; Georg Caro, in *Allgemeine Zeitung des Judentums*, volume for 1911, pp. 244-246 (May 26, 1911); Güdemann, in *Monatschrift für Geschichte und Wissenschaft des Judentums*, May-June, 1911 issue; Emil G. Hirsch, in *Reform Advocate*, vol. XLII, pp. 445-447 (issue of Nov. 11, 1911); Joseph Jacobs, in *American Hebrew*, vol. LXXXVIII, pp. 767-768 (April 28, 1911); J. H. Levy, in *Jewish Chronicle* of London, June 23, 1911, issue, p. 19; Franz Oppenheimer, in *Die Neue Rundschau*, 1911, p. 889 and in *Die Welt*, vol. XV (1911), p. 535; Rachfahl, "Das Judentum und die Genesis des modernen

Kapitalismus" in *Preussische Jahrbücher*, 1912, vol. CXLVII, pp. 17-86; S. Schechter in the *New York Times*, Sunday, March 3, 1912, Magazine Section, part V, p. 10; Samuel Schulman in the *American Hebrew*, vol. XC, pp. 695-697, 713 (April 5, 1912), address delivered before the "Judeans," New York; and E. R. A. Seligman in the *American Hebrew*, vol. XC, p. 523, March 1, 1912, *New York Tribune*, Feb. 26, 1912, and *New York Times*, Feb. 26, 1912, reports of discussion before the "Judeans," New York, Feb. 25, 1912. A collection of these printed reviews would be valuable in supplementing and correcting Sombart's work in a comparatively new field of inquiry.

MAX J. KOHLER.

Géographie Economique. L'Exploitation Rationnelle du Globe.

By PIERRE CLERGET. (Paris: Octave Doin et Fils, Editeurs. 1912. Pp. 473. 5 fr.)

The book by Pierre Clerget treats economic geography as a study of "the exploitation of the earth," while social or political geography examines the relation of the state to the land: the two parallel sciences together constituting human or anthropo-geography. In accordance with this definition, the emphasis is on man rather than nature, that is, on human activities as conditioned by nature, rather than on nature in relation to man. For this reason, the classification of the work, in the series of which it forms a part, as "applied sociology," seems not altogether amiss.

Part I is devoted to the environment. Characteristically, there is only one chapter on the physical environment, while there are three on the human environment, including population, cities, and labor conditions. Part II has to do with the development and forms of extractive industries, other than mining; and part III, with mining, manufactures, and transportation. The arrangement is thus topical rather than regional, and the method of treatment is discursive rather than didactic, the purpose being to explain not so much what is as how it came to be. As a result, there is a notable moderation in the use of descriptive matter and statistics.

The work contains little that is new and it is open to criticism in places, particularly in the chapter on physical environment. On the whole, however, it is a convenient digest of the extensive French literature on the subject; and it may be especially commended to such as still adhere to the old view of economic geography as merely a study of natural controls of industry.

There is an excellent bibliography (pp. 455-459), though the titles are all in French except one; and a brief index.

EDWARD VAN DYKE ROBINSON.

University of Minnesota.

NEW BOOKS

BANCROFT, H. H. *The new Pacific.* Revised edition. Originally published in 1899. (New York: The Bancroft Company. 1912. Pp. 549.)

BOGART, E. L. *The economic history of the United States.* Second edition. (New York: Longmans. 1912. Pp. xv, 597, illus. \$1.75.)

Rewritten and revised; new chapters on currency and labor. So drastic has been the revision in order to keep pace with economic progress that the book, according to the author, may almost be regarded as new.

BONSAL, S. *The American Mediterranean.* (New York: Moffat, Yard & Co. 1912.)

Includes a discussion of the possibilities of developing our commerce with the West Indies and with Central and South America.

BURKE, E. *Speech on American taxation.* Edited by E. J. PAYNE. (London: H. Frowde. Pp. 156. 2s. 6d.)

BRYCE, J. *South America; observations and impressions.* (New York: Macmillan. 1912. Pp. xxiv, 611, maps. \$2.50.)

Considers the economic resources and the prospect for developing industry and commerce.

CALDERON, D. I. *Bolivia.* (Washington: Pan American Union. 1912.)

CHANNING, E. *A history of the United States. Vol. III. The American Revolution.* (New York: Macmillan. 1912. Pp. 585.) Chapters 18 treats of "economic adjustment."

CHANNING, E.; HART, A. B.; and TURNER, F. J. *Guide to the study and reading of American history.* Revised and augmented edition. (Boston: Ginn. 1912. Pp. xv, 650. \$2.50.)

Originally published in 1896; now greatly enlarged. Its scope has been extended from 1865 to 1910, and naturally the contents have been strengthened by references to the literature which has appeared since 1896. Professor Turner has enriched the volume with his storehouse of knowledge of the West.

CRESSATY. *L'Egypte d'aujourd'hui, son agriculture, son état économique et politique, ses ressources financières, sa fortune immobilière et sa dette hypothécaire.* (Paris: Rivière. 1912. 8 fr.)

DOLERIS, J. A. *Le Nil argentin, étude économique et agricole sur les régions du Sud argentin, Neuquén, Rio-Negro, Confluencia.* (Paris: P. Roger et Cie. 1912. 5 fr.)

FLECK, A. A. *Kanada. Volkswirtschaftliche Grundlagen und weltwirtschaftliche Beziehungen.* Probleme der Weltwirtschaft, 10. (Jena: Fischer. 1912. Pp. xiv, 367. 13 m.)

FOSTER, W. *The English factories in India.* Vol. VII. 1642-1645. (London: Henry Frowde. 1912. 12s. 6d.)

GIBBINS, H. de B. *Industry in England. Historical outlines.* Seventh edition, revised. (London: Methuen. Pp. 506. 10s. 6d.)

GRANGER, F. *Historical sociology. A textbook of politics.* (New York: Dutton. 1912. Pp. xiv, 241. \$1.25.)

GREEN, F. E. *The awakening of England.* (London: Nelson. 1912. Pp. 369, illus. 2s.)
A plea for the revival of agriculture in England.

GRIFFIS, W. E. *Belgium: the land of art, its history, legends, industry, and modern expansion.* (London: Constable. 1912.)

GRIGAUT, M. *Cours de géographie industrielle.* (Paris: Dunod et Pinat. 1912. Pp. vi, 320, maps. 4.50 fr.)

HARTL, G. *Die wirtschaftliche Organisation des deutschen Bau gewerbes in Vergangenheit und Gegenwart.* (Berlin: Parey. 1912. Pp. 237. 4.50 m.)

HEILBORN, A. *Die deutschen Kolonien.* Aus Natur und Geisteswelt, 98. (Leipzig: Teubner. 1912. Pp. 180. 1.25 m.)
Furnishes information regarding the physical aspects of the various colonies and protectorates of Germany. The physiographic and ethnographic description of each colony is followed by a somewhat unsatisfactory account of its economic activity as well as of the development work done by the Germans. S. L.

HOVEY, C. *The life story of J. Pierpont Morgan.* (New York: Sturgis & Walton. 1912. Pp. 352. \$2.50.)
So far as the internal evidence of the book shows, the author, who is a journalist, has not obtained any special information from Mr. Morgan himself which would entitle him to act as biographer, nor does he possess any qualifications for the task other than those of an easy style and a fair mind. The book is based upon printed records, newspaper articles, and current gossip. Lacking intimate knowledge of his subject Mr. Hovey has written a general account of the industrial development of the last fifty years, with especial emphasis upon those enterprises with which Mr. Morgan is popularly identified. E. L. B.

ILES, G. *Leading American inventors.* (New York: Holt. 1912. \$1.75.)

ILLGEN, R. *Geschichte und Entwicklung der Stickerei-Industrie des Vogtlandes und der Ostschweiz.* (Annaberg: Graser's Verlag. 1918. Pp. viii, 120. 2.80 m.)

KARMIN, O. *La question du sel pendant la Révolution.* (Paris: Champion. 1912. Pp. 272. 7.50 fr.)

KOWALEWSKY, M. *Die ökonomische Entwicklung Europas bis zum Beginn der kapitalistischen Wirtschaftsform.* (Berlin: R. L. Prager. 1913. Pp. xi, 501. 10.75 m.)

LAMPP, F. *Die Getreidehandelspolitik in der ehemaligen Grafschaft Mark während des 18. Jahrhunderts.* (Münster: Franz Coppenrath. 1912. Pp. vii, 191. 3.50 m.)

MCLELLAN, W. S. *Smuggling in the American colonies.* (New York: Moffat, Yard. 1912. Pp. xx, 105. \$1.)

MIMS, S. L. *Colbert's West India policy.* (New Haven: Yale University Press. 1912. Pp. xiv, 385. \$2.)

NEWBIGIN, M. I. *Man and his conquest of nature.* (London: Black. 1912. Pp. viii, 183. 2s.)

PEABODY, R. E. *Merchant venturers of old Salem; a history of the commercial voyages of a New England family to the Indies and elsewhere in the eighteenth century.* (Boston: Houghton Mifflin. 1912. Illus. \$2.)

ROGERS, T. *Work and wages.* (London: Unwin. 1912. 1s.)
A new edition mainly devoted to modern facts selected from Professor Roger's larger work.

SALVIOLI, J. *Der Kapitalismus im Altertum.* Translated from the Italian by K. KAUTSKY. (Stuttgart: J. H. W. Dietz. 1912. 2.50 m.)

SCHACHNER, R. *Australien und Neuseeland: Land, Leute, und Wirtschaft.* Aus Natur und Geisteswelt, 366. (Leipzig: B. G. Teubner. Pp. 120. 1.25 m.)
During his stay in Australasia the author made a thorough study of this country's social and commercial legislation. He presents a condensed though comprehensive and sympathetic account of the different measures passed in Australia and in New Zealand in order to improve labor conditions and to insure social peace. The book lacks proportion; thus while the author gives lengthy statistics of wages before and after the establishment of wage boards, he barely touches upon the country's transportation facilities.

S. L.

SCHOFF, W. H. *The Periplus of the Erythraean Sea: travel and trade in the Indian Ocean by a merchant of the first century.* Translated and annotated. (New York: Longmans. 1912. Pp. 123.)

SHEPHERD, W. R. *Historical atlas.* (New York: Holt. 1911. Pp. 182.)
Contains maps on medieval commerce in Europe, in Asia, plan of medieval manor, industrial England since 1750, and trade routes.

TALBOT, F. A. *The new garden of Canada*. (New York: Cassell. 1912. Illus. \$2.50.)

TAWNEY, R. H. *The agrarian problem in the sixteenth century*. (New York: Longmans. 1912. Pp. ix, 464. \$3.)

TOULMIN, H. A. *Social historians*. (Boston: Badger. 1912. \$1.50.)

VINOGRADOFF, P. G., editor. *Oxford studies in social and legal history*. Vol. III. *The estates of the Archbishop and Chapter of Saint-André of Bordeaux under English rule*, by E. C. LODGE; *One hundred years of poor law administration in a Warwickshire village*, by A. W. ASHLEY. (New York: Oxford University Press. 1912. \$4.15.)

WALLACE, D. M. *Russia*. Revised edition. (London: King. 1912. Pp. 784. 12s. 6d.)

There are new maps showing the zones of vegetation and mineral deposits and the density of population.

WARNER, G. T. *Tillage, trade, and invention. An outline of industrial history*. Eleventh edition. (London: Blackie. Pp. 206. 2s.)

First published in 1899; has met with wide approval. Author has made a complete revision, but no new landmark representing recent development has been added.

WHIDDEN, G. C. and SCHOFF, W. H. *Pennsylvania and its manifold activities*. (Philadelphia: Local Organizing Committee of the Twelfth International Congress of Navigation. 1912. Pp. 287.)

Almost half of the volume is devoted to the subject of transportation; the extractive and manufacturing industries are briefly described; the growth of cities and the subject of education are considered; but agriculture, commerce, and banking are omitted. So far as it goes the work is well done, both the historical development and the present situation being adequately presented. There are many excellent illustrations.

E. L. B.

WINGERTER, C. A., editor. *History of greater Wheeling and vicinity, a chronicle of progress and a narrative account of the industries, institutions and people of the city and tributary territory*. (New York: Lewis Pub. Co. 1912. Two volumes, illus. \$20.)

— *The Argentine Republic in 1911*. (New York: Argentine Consul-General. 1912. Pp. 16, illus. Gratis.)

— *Economic development of France in 1910 and 1911*. Report by H. M. Consul-General at Paris. (London: Wyman. 1912. 8s.)

— *Documents inédits sur l'histoire économique de la Révolution française*. (Paris: Leroux. 7.50 fr.)

Agriculture, Mining, Forestry, and Fisheries

NEW BOOKS

GRANDEAU, L. *L'agriculture et les institutions agricoles du monde au commencement du XX^e siècle.* Five volumes. (Paris: Rivière. 1912. 20 fr.)

HOLMES, G. K. *Supply of farm labor.* Bulletin 94, Bureau of Statistics. (Washington: Department of Agriculture. 1912. Pp. 81. 10c.)

HOLMES, G. K. *Wages of farm labor. Nineteenth investigation, in 1909, continuing a series begun in 1896.* Bulletin 99, Bureau of Statistics. (Washington: 1912. Pp. 72. 10c.)

HOOD, C. *Iron and steel; their production and manufacture.* (New York: Pitman. 1912. Pp. 150, illus. 75c.)

HOSKIN, A. J. *The business of mining.* (Philadelphia: Lippincott. 1912. Pp. 224, illus. \$1.50.)

KINKAID, D. B. *Kinkaid on irrigation law of Colorado; the law of irrigation as enunciated by the Colorado appellate courts and the statutes on water rights and irrigation.* (Denver: W. H. Court-right Pub. Co. 1912. Pp. 486.)

LUBBERT, H. *Die grossbritannische Hochseefischerei.* (Berlin: E. S. Mittler. 1912. Pp. 89, illus. 0.50 m.)

MILLANT, R. *La culture du pavot et le commerce de l'opium en Turquie.* (Paris: Challamel. 1912. 2 fr.)

MUSSIG, E. *Preisentwicklung in der Montan-Industrie seit 1870 mit Berücksichtigung besonderer Einflüsse, gegeben durch die technischen Fortschritte, sowie durch die Politik der Einzelwirtschaft und des Staates.* (Augsburg: T. Lampart. 1912. Pp. vii, 116. 2.50 m.)

PASSY, L. *Histoire de la société nationale d'agriculture de France. Vol. I. 1761-1793.* (Paris: Alean. Pp. viii, 473. 7.50 m.)

PRATT, E. A. *Agricultural organisation; its rise, principles and practice abroad and at home.* (London: King. 1912. Pp. 272. 3s. 6d.)

ROBERTSON SCOTT, J. W. *A free farmer in a free state.* (London: Heinemann. 1912. Pp. xx, 335, xxii, illus. 6s.)

A study of the rural life and industry of Holland by the author commonly known as "Home Counties."

SOMERMEIER, E. E. *Coal: its composition, analysis, utilization, and valuation.* (New York: McGraw-Hill. 1912. Pp. xi, 175. \$2.)

WOLFF, H. W. *Coöperation in agriculture.* (London: King. 1912. Pp. 378. 6s.)

Enquête sur les salaires agricoles. Publication du Ministère de l'Agriculture. (Paris: Berger-Levrault. 1912. Pp. 495. 2.50 fr.)

Manufacturing Industries

NEW BOOKS

COPELAND, M. T. *The cotton manufacturing industry of the United States.* Harvard economic studies. (Cambridge: Harvard University Press. 1912. \$2.)

CRITCHELL, J. T. and RAYMOND, J. *History of the frozen meat trade.* (London: 1912. Pp. xviii, 442. 10s. 6d.)

DEHIO, K. *Die Bischweiler Tuchindustrie.* (Strassburg: K. J. Trübner. 1912. 2.50 m.)

GELLERT. *Eisen und Alteisen in ihren technischen und wirtschaftlichen Beziehungen.* (Munich: Duncker & Humblot. 1912. Pp. vi, 78. 2.50 m.)

GROSSMANN, H. *Die chemische Industrie in den Vereinigten Staaten und die deutschen Handelsbeziehungen.* (Leipzig: Veit & Co. 1912. Pp. v, 85. 3.50 m.)

MATSCHOSS, C. *Die Maschinenfabrik R. Wolf, Magdeburg-Buckau, 1862-1912.* (Berlin: Springer. 1912. Pp. 162, illus. 8 m.)

SNELLMANN, G. R. *Recherches sur l'industrie du papier en Finlande.* (Helsingfors: Imprimerie du Sénat Impérial de Finlande. 1912.)

WINDORF, H. *Die thüringische Porzellanindustrie in Vergangenheit und Gegenwart.* (Leipzig: W. Schunke. 3 m.)

ZIEGLER. *Die Zuckerproduktion der Welt und ihre Statistik.* (Magdeburg: A. Rathke. 1912. Pp. viii, 90. 2.50 m.)

Statistics of the American and foreign iron trades.
Part I of the annual statistical report for 1911. (Philadelphia: Am. Iron and Steel Assoc. 1912. Pp. 104.)

Centenary lectures. Delivered at the celebration of the first commercial gas company to sell gas as an illuminant, held at the Franklin Institute, Philadelphia, Apr. 18-19, 1912. (New York: Am. Gas Institute. 1912. Pp. 174, illus.)

Transportation and Communication

The Lakes-to-the-Gulf Deep Waterway. A Study of the Proposed Channel, Terminals, Water Craft, Freight Movement, and Rail and Boat Rates. By WILLIAM ARTHUR SHELTON. (Chicago: A. C. McClurg. 1912. Pp. x, 133. \$1.00.)

In this reprint of articles which have appeared recently in the "Journal of Political Economy," Mr. Shelton confines his investigations to the field indicated by the subtitle of the monograph, purposely ignoring the kindred subjects of land reclamation, flood control, and water-power development. The study is based upon current governmental reports, supplemented by in-

formation obtained from river and railroad tariffs and from interviews and correspondence with interested industrial officials. The writer makes no attempt at a comparative historical survey of water and rail rates, although he could have strengthened his arguments by this method. The general tone of the monograph is highly unfavorable to governmental expenditure in deepening the Lakes-to-the-Gulf waterway as a means of reducing freight rates. In the chapter on the Interchangeability of River, Lake, and Ocean Vessels, the impracticability of such a scheme is made clear. "The river freight in the main is that which originates in, or is destined to, points within the levee or other non-rail points." The already navigable stretches of the lower Mississippi are "of doubtful economic value."

While Mr. Shelton has done little more than restate the conclusions of other opponents of the proposed deep waterway, his monograph is an addition to the literature on the subject because it deals only with specific traffic difficulties and with these in a concise, concrete manner.

H. E. HOAGLAND.

New York Department of Labor.

The History of the British Post Office. By J. C. HEMMEON.
(Cambridge: Harvard University. 1912. Pp. xi, 261.
\$2.00.)

This volume, the seventh in the series of *Harvard Economic Studies*, will not be accounted more entertaining than earlier books on the same subject, but it certainly excels them otherwise. Former writers on the British post office generally made abundant use of their opportunity to dwell upon the picturesque aspects of the subject. The present book does not err in this direction. The tendencies which I venture to criticise are all of the opposite sort. Opportunities for vivid description are neglected; letters, petitions, reports, and other documents are cited, but rarely and only briefly quoted; the published reminiscences of postal officials are avoided; affairs which appeal most to popular imagination, such as the efforts of Rowland Hill, do not receive as much attention as their importance warrants. Will not every reader be disappointed when he is informed that "the history of the adoption of penny postage has been so well told by Hill himself that only a bare story of its acceptance by Parliament is necessary here" (p. 59)? The significance of the post office in the broader prob-

lems of monopoly, of government, of democracy, and of the diffusion of intelligence is but faintly suggested. The last-named limitation of the work is emphasized, rather than corrected, by the fact that certain of these larger problems are suggestively touched upon in the preface.

For the author's treatment of his subject under the limitations which he seems consciously to have imposed upon himself, I have only commendation to offer. The general arrangement seems to me the proper one, though some readers will doubtless differ. As the author acknowledges (p. vi), "in the treatment of a subject so complex . . . it is not easy to decide how far its presentation should be strictly chronological or how far it should be mounted in 'longitudinal sections' exposing its salient features." The first third of the book consists of four chapters on the general history of the post office; the remainder embraces seven chapters on the principal technical problems of the service. Those who are interested in history simply as history, will be disappointed in the distribution of the material, but few such are likely to read a serious post office history. On the other hand, those who seek to study the economic problems of the post office in the light of history can hardly fail to find Mr. Hemmeon's arrangement most satisfactory. There is just enough preliminary history to give the remaining chapters the proper setting.

Aside from an excess of zeal in avoiding the spectacular, the emphasis of the book is well distributed; the relative importance of the various problems seems to be well considered; trivial matters, though not neglected, are at least subordinated; weighty matters are given due attention. In so long and intricate a history it is no slight merit to preserve a true sense of perspective. With consistency the author depends exclusively upon official information—state papers, reports, and journals. He did not have access to the originals, but he used the calendars and other printed sources faithfully and successfully. He has written in entire independence of other authors. Joyce is the only post office historian whom he consults, and he cites him sparingly, realizing that "writing as a post office official at the end of the nineteenth century Joyce hardly appreciated the conditions which his predecessors had to meet" (p. 256). The author is also to be commended for the historic tolerance consistently displayed in dealing with the policies of former days.

Finally, the study deserves to be described as comprehensive.

It may be that more attention should have been given to the railways as mail carriers, but otherwise the inland and foreign transmission of mails has been thoroughly reviewed. The longest chapter, and one of the most interesting, deals with postage rates and the finances of the office, and includes a discussion of the franking privilege. Savings bank and assurance facilities, while of great importance as social experiments, are treated in a manner which is probably adequate in view of their importance to the post office. Other subordinate functions, such as the book post, the newspaper post, the parcels post, money orders, registry of letters, and special delivery, are also sufficiently described. Separate chapters are devoted to the telegraph and the telephone, and half a chapter deals with the relations between the government and its postal employees.

WILLIAM H. PRICE.

Yale University.

Combination among Railway Companies. By W. A. ROBERTSON.
(London: Constable and Company. 1912. Pp. 105. 1s. 6d.)

Seven different kinds of combination among the railway companies in England are described, *viz.*, amalgamation, joint-line, working-union, lease, working-agreement, running powers, pooling-agreement. The advantages and disadvantages of combination to the participating companies, outside companies, and to the public interests are considered. Outside of the blue-books, there has been surprisingly little discussion of this phase of English railway policy, and it is to be hoped that Mr. Robertson's lectures, which were delivered originally at the London School of Economics, will prove to be the precursor of a more detailed study. The present volume is marked by a certain roughness of style and by occasional obscurity of phrase, but, for all that, it makes agreeable reading. Intensive analysis is somewhat lacking, but probably a rather general treatment was called for by the conditions under which the lectures were delivered.

Mr. Robertson favors amalgamation, and argues that competition naturally tends to decline between railways which have attained a high degree of efficiency, associated with small profits. Such a condition, of course, tends to lead to combination, but, until combination is achieved, competition is hardly likely to become inert. When combination takes place, regional competition,

or competition of districts, as he terms it, may be relied upon to bring about progress. But Mr. Robertson fails to point out that the intensity of the stimulus will vary materially with the degree of economic parallelism between the districts of separate railway control.

ERNEST RITSON DEWSNUP.

The University of Illinois.

A History of Inland Transport and Communication in England.

By EDWIN A. PRATT. (New York: E. P. Dutton and Company. 1912. Pp. x, 532. \$2.00.)

Mr. Pratt's book is the introductory volume of an English series on "National Industries," under the general editorship of Mr. Henry Higgs. American students of the industrial economy will look forward with pleasurable anticipation to the various volumes that are to appear under Mr. Higgs' expert guidance, especially as the announcements thus far made promise contributions from the younger English economists, whose names are as yet not so familiar here as among our colleagues in England.

In his excursion into history, a somewhat novel field for Mr. Pratt, he has aimed to present to his readers a connected account of the development of internal communication in England from the primitive facilities of the early tin-trading Briton to the motor-omnibuses, railless trams and aeroplanes of the *fin-de-siècle* traveler. A noteworthy proportion of the volume, nearly a fourth, is devoted to roads; between two fifths and a half to railways; and the remainder to rivers, canals, motor conveyance, etc. A list of authorities, extending over more than seven pages, is appended. The latter part of the title of the book would lead one to infer that communication by post, telegraph, and telephone was included, but this is not so.

Mr. Pratt is an old hand at writing for the public, and the present volume lacks neither in lucidity nor in interest. Quotations might, with advantage, have been used more sparingly, but, at any rate, they are apropos; altogether the book is well designed to familiarize the general reader, in agreeable fashion, with the progress of transportation facilities in England. Footnotes are practically dispensed with, and even references are inserted parenthetically in the body of the text—the latter surely a questionable device. The bibliography of authorities consulted is an interesting one, though one wonders why the parliamentary papers

that the author used in the preparation of his history are not recorded more completely; or why certain omissions occur—for example, Dr. Lardner's classic treatise of 1849-50, which, by the way, is not even mentioned in the text; or why some entries are made under "T" because their titles commence with the definite article. Where the sources are so miscellaneous, a classified and annotated list is a moral obligation; carelessly prepared lists are literary *lèse-majesté*.

Mr. Pratt deals with a branch of economic history, of which our knowledge is curiously uneven. Much hard digging must be the lot of anyone who aims at a thoroughly satisfactory treatment. This research Mr. Pratt has not done to any extensive degree, probably conceiving that, for the purpose he had in view, it was unnecessary. But, as a consequence, the book suffers from the point of view of the student; and even to the general reader, its value is impaired. There is a distinct lack of proportion. The part played by canal navigation is inadequately brought out; the material progress of railway communication during the half century following 1840-1850 is scarcely noted; except in the earlier chapters, the author fails to bring into sufficient relief the relation between the development of inland transportation and the economic advance of the country; the results of the commission regulation of the acts of 1873 and 1888 receive little consideration, and so on. On the other hand, Mr. Pratt gives disproportionate attention to the highways, though, on the whole, this is the most successful part of the book. For a history limited to five hundred pages, his description of the present status of the railway industry is full to the point of distention. In numerous places, the narrative could have been compressed with advantage, and the space thus made available used for expansion elsewhere.

But though in this work Mr. Pratt has not done full justice to his own great abilities, the fact must not be overlooked that he has brought together within the compass of his volume much scattered material, and thereby has made intelligible to all, for the first time, the fascinating story of the development of England's transportation system. And this is no small achievement.

ERNEST RITSON DEWSNUP.

University of Illinois.

NEW BOOKS

BIERMER, M. *Die hessische Eisenbahnfrage nach dem Landtagsschlußse.* (Giessen: E. Roth. 1912. 1.50 m.)

BOAG, G. L. *Manual of railway statistics.* (London: Railway Gazette. 1912. Pp. 185. 4s.)

CLEVELAND and POWELL. *Railroad finance.* (New York: Appleton. 1912. Pp. xv, 462. \$2.50.)
To be reviewed.

FERRONI, F. *Un'amministrazione ferroviaria di Stato: le ferrovie Prussiane, 1879-1911.* (Bologna: N. Zanichelli. 1912. Pp. 200.)

GRAVES, A. G. *Before the Interstate Commerce Commission, memorial asking for one national interchangeable railroad mileage ticket.* (Chicago: Peterson Linotype Co. 1912. Pp. 32. \$1.)

HUBEL, P. *Deutsches Post- und Telegraphenwesen unter besonderer Berücksichtigung der gesamten Literatur.* (Munich: Andelfinger. 1912. Pp. xi, 98.)

HUMMEL, H. *Baden und die Eisenbahngemeinschaft.* (Karlsruhe i. Bad.: G. Braun. 1912. 0.50 m.)

JACKMAN, W. J. and others. *Express service and water transportation.* (Minneapolis: University Extension Society. 1912. Pp. 432.)

JACKMAN, W. J. and others. *Freight rates and classifications.* (Minneapolis: University Extension Society. 1912. Pp. 420.)

MELNIK, J. *Die Hamburg-Amerika-Linie. Ein geschichtliches Überblick von 1847 bis auf die Gegenwart.* (Darmstadt: E. Roether. 1912. Pp. 78. 0.80 m.)

MINOR, G. H. *The Erie system; a statement of various facts relating to the organization and corporate history of the various companies controlled.* (New York: Wilbert Garrison Co. 1912. Pp. xii, 576.)

MOSSTON, C. P. *Railway operating statistics.* (London: Railway Gazette. 1912. 65c.)

PHELPS, E. M., compiler. *Selected articles on government ownership of railroads.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1912. Pp. xxxi, 179. \$1.)

A brief of 9 pages is followed by a bibliography of 11 pages, supplemented by about 175 pages of extracts from various periodical articles. On the whole, good judgment has been shown in the selection of the articles.

PICARD, E. *Die Finanzierung nordamerikanischer Eisenbahngesellschaften.* (Jena: G. Fischer. 1912. 6 m.)

SZILLEVY, B. *Osterreichs volkswirtschaftliche Interessen an der Seeschifffahrt.* (Vienna: L. W. Seidel. 1912. Pp. v, 103. 2.50 m.)

TEUBERT, W. *Getreidefrachten und Getreideverkehr auf deutschen Eisenbahnen und Wasserstrassen.* (Berlin: C. Heymann. 1912. Pp. viii, 103. 5 m.)

WILHOIT, R. and McLELLEN, H. C. *The commerce laws of Kentucky.* (Louisville. Interstate Pub. Co. 1912. Pp. 223. \$3.75.)

— *Power of Congress over interstate commerce.* (Washington: Judiciary Committee. 1912. Pp. 318.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

BOERNER, A. *Kölner Tabakhandel und Tabakgewerbe, 1682-1910.* (Essen: G. D. Baedeker. 1912. Pp. xiii, 249. 6 m.)

COLSON, C. *Statistique des transports et du commerce international en France et à l'étranger.* (Paris: Gauthier-Villars. 1912. Pp. 48. 1 fr.)

FINDEISEN, C. F. *Grundriss der Handelswissenschaft.* Tenth edition. (Leipzig: F. Hirt & Son. 1912. Pp. 416. 4.50 m.)

JACKMAN, W. J. and others. *Legal features of commerce regulation.* (Minneapolis: University Extension Society. 1912. Pp. 394.)

JACKSON, F. H. and others. *Lectures on British commerce.* (London: Pitman. 1912.)

LANDAUER, E. *Handel und Produktion in der Baumwollindustrie unter besonderer Berücksichtigung der lohnindustriellen Organisationsform.* Archiv für Sozialwissenschaft und Sozialpolitik, Supplementary No. 7. (Tübingen: J. C. B. Mohr. 1912. Pp. xi, 183. 4.60 m.)

LESCURE, J. *Les marchés financiers de Berlin et de Paris et la crise franco-allemande de juillet-octobre, 1911.* (Paris: Larose et Tenin. 1912. 2 fr.)

SCHMIDT, F. *Liquidation und Prolongation im Effektenhandel.* (Leipzig: C. E. Poeschel. 1912. Pp. vii, 283. 11.50 m.)

SCHWARZWALDER, W. *Die Entwicklung des Nürnberg-Fürther Exportes nach den Vereinigten Staaten von Nordamerika von seinen Anfängen an bis zur Gegenwart.* (Nürnberg: B. Hilz. 1912. Pp. vi, 143. 2 m.)

WEBER, R. *System der deutschen Handelsverträge.* Wirtschafts und Verwaltungsstudien, mit besonderer Berücksichtigung Bayerns, 48. (Leipzig: A. Deichert. 1912. Pp. xii, 464. 12 m.)

Accounting, Business Methods, Investments, and the Exchanges

The Work of Wall Street. An Account of the Functions, Methods and History of the New York Money and Stock Markets.

By SERENO S. PRATT. (New York: D. Appleton and Company. 1912. Pp. xii, 440. \$1.75.)

This is a revision and enlargement of the author's book of the same title published ten years ago. The changes that have taken place in the money and stock markets during this interval have been mainly those due to the commercial growth of the nation. The scope of Wall Street is divided by the author into four principal parts: (1) foreign exchange; (2) domestic credits or that part of the internal trade of the country which is settled by drafts on New York; (3) promotion, by which capital is directed into new enterprises; (4) stock exchange loans for both investment and speculation.

These branches of the money market are detailed fully and minutely in chapters 3 to 20, with admirable clearness, and without error perceptible to the reviewer. Most of the processes described are so familiar to the habitual readers of the *Review* that a recapitulation of them would be superfluous. The Stock Exchange Clearing House, however, is a puzzle to many well-instructed persons. To this a chapter of eleven pages is given. The essential feature of this machine is the same as that of the Bankers Clearing House; that is, each broker settles all his trades with the clearing house instead of settling with the individual brokers. The transactions are reported to the clearing department by means of tickets, showing the securities and the prices. At the conclusion of the day's business the total is shown on a clearing sheet together with the net amount of securities and cash due from, or to, each broker. The borrowing of shares is included among the purchases, and the lending among sales. Of course many trades cancel each other in whole or in part, and the balance only is settled by delivery or cash payment. On the 9th of May 1901 (a panic day), the total sales of shares were 3,336,695 and the value of the share balances was \$129,800,000 but the cash balances required to settle this great total were only \$5,461,700, and the time required to make this settlement was no greater than it would have been if the sales had been only 100,000 shares. The saving of time, labor and negotiation of loans is enormous. The business could not be carried on in its present volume without the clearing system.

Chapter 24 on Panics might be made clearer by a definition of clearing house loan certificates. We are told on page 349 that when panic follows a commercial crisis, "banks contract their loans, forced liquidation sets in, weak houses are driven to the wall, failures are announced, general bankruptcy is threatened,

the clearing house is obliged to issue loan certificates for the protection of solvent firms temporarily embarrassed," etc. Again, on page 359 it is stated that, by the issue of loan certificates "the banks are able without fear to extend credit to their solvent customers and thus thousands of deserving firms are saved from failure." The only previous definition of loan certificates is on page 262 where they are said to be issued in times of dire emergency and are "in the nature of temporary loans made by the banks associated together as a Clearing House association to the members thereof for the purpose of settling Clearing House balances." This definition might convey to the mind of an un instructed person the idea that the certificates were a kind of fiat money issued on the credit and responsibility of all the banks joined together, in which case there is no reason why there should be any limit to the amount of them. In fact each certificate of \$5000 recites that the bank to which it is issued has deposited securities with the loan committee of the clearing house amounting to 25 per cent more than the face value of the certificate and that it will be received in settlement of debit balances at the clearing house. The manager of the clearing house will accordingly turn over the certificate, when it comes into his hands, to some bank which has a credit balance equal to, or in excess of, \$5000. In other words the strong banks loan their surplus cash to the weak ones on the security of the bills receivable held by the loan committee, and receive compensation in the way of interest which the certificates bear. The clearing house is not responsible for the redemption of the certificate but only for the safekeeping and the redelivery of the securities. The limit to the issue of loan certificates is measured by the ability of the creditor banks to absorb them. Before this limit is reached it may happen that the banks begin to curtail the payment of cash to their customers over the counter. This is really bank suspension but the legal penalties of such default are seldom or never enforced.

HORACE WHITE.

The Principles of Bond Investment. By LAWRENCE CHAMBERLAIN. (New York: Henry Holt and Company. 1911.

Pp. xiii, 551.)

The Work of the Bond House. By LAWRENCE CHAMBERLAIN.

(New York: Moody's Magazine Book Department. 1912.

Pp. 157. \$1.85.)

Not only will the investor be instructed by these volumes, but many economists will find them useful and suggestive. The larger work covers the entire field of bond investment with the exception of industrial bonds. Bonds supported by taxing power, especially those of states and municipalities, are given detailed consideration. The treatment of this subject is clear and thoroughgoing. The exposition of the mathematics of bonds is quite adequate for every practical purpose. On the bonds of corporations the treatise is less satisfactory. An excessive amount of space is given to an elaborate classification of bonds, a matter which might well have been relegated to a glossary. Elsewhere also descriptive matter in abundance is furnished on topics which require careful analysis together with ample specific illustrations. On railroad bonds, for example, a summary account is given of the various kinds of data to be found in railroad reports. But in the absence of detailed analysis of the reports of particular roads over a series of years it may be doubted whether the exposition will start investors very far on the way toward intelligent discrimination in the purchase of railroad bonds.

The effect of rising commodity prices on the market quotations of bonds with distant maturities is a matter to which investors seem now to be giving somewhat belated attention. Mr. Chamberlain, by a process of reasoning far from convincing, reaches the conclusion that this depressing influence is not likely to continue very much longer. One may venture the opinion that the bond houses in the interest of investors would be well advised to insist that issues of bonds should mature within a relatively short period—say from ten to fifteen years.

Aside from this question the smaller volume contains all, and upon some points more of discussion of problems of general interest relating to dealings in bonds; and will, therefore, serve every purpose for most economists. While the enormous expense of marketing bonds under the present system of distribution is recognized by the author, he seems hopeless of any appreciable improvement in the future. It is argued that under any other arrangement, such as sales through local bankers as agents, the bond houses would cease to protect the issues which they have marketed. The reasoning here is not entirely convincing since it would be necessary for the bond houses to cultivate and keep the good will of the local bankers through whom their securities were marketed.

To economists these volumes are of particular value because of the light they throw upon one of the most important single influences determining the capitalization of corporations. Investment bankers are primarily interested in providing and marketing securities which in safety of principle and steadiness of yield shall meet the expectations which induce their purchase by investors. The requirements which are requisite to secure this result may be divided into two classes to which the terms static and dynamic may be applied. Under the static method a particular security is surrounded with safeguards designed to give a lien upon definite property, the value of which it is reasonable to expect will always be greater than the securities themselves. Restrictions on issue of additional securities having a similar lien and provisions for a sinking fund, especially if assets are of a wasting character, are also essential features of this form of protection. When capital has been raised in this way the corporation can only appeal to the speculative investor for such additional capital as may be required. Safeguards on one class of securities are made so drastic as to render all others more or less speculative. In these circumstances it is difficult to see how it will be possible to secure capital even by public service corporations without some injection of water into the junior securities placed upon the market. In the course of time we may come to finance such companies by means of stock issues alone; but at present the financial machinery is in large measure lacking. Conservative investors are reached through bond houses; those with distinct speculative propensities are offered the kind of speculative securities they desire. During recent years there has been some development of machinery for the marketing of conservatively issued stocks of companies all of whose capitalization represents tangible property or fairly well assured earning power. Such developments as these do not fall within the scope of the volume before us. It is a development, however, which may properly be mentioned here since Mr. Chamberlain seems not unwilling to leave the impression in the mind of the reader that only bonds can by any possibility be regarded as a conservative investment.

O. M. W. SPRAGUE.

Harvard University.

Capitalization. A Book on Corporation Finance. By W. H. LYON. (Boston: Houghton Mifflin Company. 1912. Pp. xi, 296. \$2.00.)

This is a serious work, written by an intelligent and well-informed author with considerable skill at analysis. It discusses the instruments of capitalization, *i.e.*, the various kinds of securities issued, "trading on the equity," a phrase said to be of good English usage but not familiar on this side of the Atlantic, "watered stock," "financing an expansion," "amortization," the form of securities, various factors affecting marketability, and "capitalization and the state."

Professor Lyon has set himself the difficult task of writing both for the experienced and the inexperienced. Consequently parts of the book are too elementary for the readers who may get profit from other parts, while for beginners there is danger that much of the book will be as hard to comprehend and to remember as the printed notes of a game which one has never played. On the whole, the book would give more satisfaction if the author had left the beginners to pick up what they could on the street, and, instead of covering so wide and heterogeneous a field, had examined exhaustively a few peculiarly interesting divisions of his subject. The book improves as it advances toward specific problems. But the last chapter, Capitalization and the State, after giving a brief and dispassionate summary of the problems involved—problems which are now stirring this nation from one end to the other—leads the way to no conclusion, except the conclusion that a conclusion cannot be reached.

The most entertaining portion of the book is that which shows the ingenuity used in devising such phrases as "first and refunding" mortgages, "consolidated" mortgages, etc. Excellent illustrations are given of the imposing descriptions of bond issues by the Erie Railway, tending to conceal the fact that they represent only sixth, seventh, and eighth liens. The chapter on amortization is also very interesting and the author's special knowledge of the customs of banking houses which offer the public comparatively small issues of public utility bonds gives picturesqueness to his treatment of this portion of his subject.

There are needless inaccuracies. For example, on page 32 the author states that American Telephone convertible bonds "are convertible into common stock at 140 before March 1, 1918"; on page 49, speaking again of these bonds, he states, "They are

convertible, up to March 1, 1918, at par into stock at 133.7374." Not only are these statements inconsistent with each other but neither is correct. On page 128 he says, "The Northern Pacific Railway and the Great Northern Railway are both obligors on the \$107,613,500 of bonds known as the Chicago, Burlington and Quincy joint 4s." The truth is that the size of this issue is not \$107,613,500 but \$215,227,000.

JOHN F. MOORS.

Stocks and Bonds. The Elements of Successful Investing. By ROGER W. BABSON. (Wellesley Hills, Mass.: The Babson Statistical Organization. 1912. Pp. 402.)

Mr. Babson has wisely assumed that he is writing for only one class of readers, the inexperienced. He has also sought to be entertaining and has introduced many anecdotes. He writes with conviction. Ideas, mostly sound, are not lacking in the author or association of authors responsible for the book. Persons with money to invest and no other sources of advice or information may read it with profit to themselves.

The first chapter does not do the author justice. In this chapter the youthful reader is advised to become a young prig who shall make a point of going to his bank frequently, taking pains to get acquainted with all the officials, for the purpose of acquiring credit. The chances are that the young man's persistent desire to be "on the make" will affect his banking friends unfavorably. "The depositor who calls at the bank only once a year has not such good 'credit' as the one who calls each month," says the book. The truth is that depositors who never call have the best credit and are best liked.

The most interesting parts of the book are those which urge the reader to avoid disreputable securities, and which analyze various kinds of public service corporations. The advertisements once prevalent on the financial pages of the Sunday papers are properly disapproved. The constant tendency toward increased earnings of gas, electric, street railway and telephone companies and their stability in panics are plainly set forth. While the author recognizes that the labor factor is more serious for street railways than for gas or electric light and power companies, he seems hardly to realize the other advantages of the latter. As he uses Boston largely for his examples, the much greater prosperity of the Edison Electric Illuminating Company

and of the Massachusetts Gas Company, than of the Boston Elevated Railway Company might well be analyzed by him.

The book is marred by the intrusion on blue paper, between the pages, of advertisements of other works by the same author.

J. F. MOORS.

The New Industrial Day. By WILLIAM G. REDFIELD. (New York: The Century Company. 1912. Pp. ix, 213. \$1.25.)

The author's fundamental idea is that of a close relation between the "conservation of human resources" and what is called "scientific management." He discourses on this text both copiously and effectively, and there is abundant illustration of sound and humane business practices supplied out of a long and successful career in business. Although a firm believer in scientific management, Mr. Redfield objects to the idea that the system can be made automatic in its operation. The most important plank in the new industrial platform must consist in close coöperation and sympathy between the management and the workmen. The experiment will fail unless a management, in introducing the new system into its shops, does so quite as much in the interest of the welfare of the employee as in that of the reduction of unit costs.

HERBERT CROLY.

NEW BOOKS

ALLEN, S. E. *The diagrammatic presentment of the accounts of local authorities.* (London: Gee & Co. 1912. Pp. 60, 19 diagrams. 8s.)

BLACKFORD, K. M. *Employers' manual: instructions to employment supervisors and other executives in the use of the Blackford employment plan.* (New York: The Emerson Co. 1912. Pp. 47.)

BURNIER, A. *A B C des opérations à la bourse de New-York et des placements en valeurs mobilières aux Etats-Unis.* (Paris: Fontemoing et Cie. 1912. 3.50 fr.)

CAMPBELL, T. F. *Campbell's actual accounting.* (Indianapolis: Bobbs-Merrill. 1912. Pp. 267. \$2.)

COLLIER, W. M. *Law and practice in bankruptcy under the national bankruptcy act of 1898.* Fourth edition by W. H. Hotchkiss. Ninth edition with amendments of 1903, 1906 and 1910, and with decisions to July 1, 1912, by F. B. Gilbert. (Albany: M. Bender. 1912. \$9.)

COMBAT, F. L. *Manuel des opérations de bourse.* (Paris: Berger-Levrault. 1912. Pp. xi, 383. 6 fr.)

DOWLER, F. and HARRIS, E. M. *Auditing, accounting, and banking. A manual for accountants.* (London: Pitman. 1912. Pp. 328. 5s.)

FURST, M. *Die Börse, ihre Entstehung und Entwicklung, ihre Einrichtung und ihre Geschäfte.* (Liepzig: Verlag der modernen kaufmännischen Bibliothek. 1913. 5.50 m.)

HAMILTON, W. R. *The principles of modern bookkeeping.* (London: Gee & Co. 1912. Pp. 144. 4s.)

HARTNESS, J. *The human factor in works management.* (New York: McGraw-Hill Book Co. 1912. Pp. vi, 159. \$1.50.)

A small book full of broad and stimulating ideas. The author is the general manager of the Jones and Lamson Machine Co. of Springfield, Vermont. The principal theme is the inertia of habit, and the effect of this upon administrative policies. Part I is general in character, while Part II deals with the ideas previously presented, as applied to the work of the machine designer and builder. The book does not aim to present a carefully elaborated plan; but rather to supplement such plans as have been presented by others, by educating the reader to a new point of view, and by creating in him a new sensitiveness for the intellectual and moral elements in the human nature with which the executive must deal.

E. D. J.

HINE, C. D. L. *Modern organization: an exposition of the unit system.* (New York: Engineering Mag. Co. 1912. Pp. 110. \$2.)

LEONHAUSER, U. L. *Handbook of municipal accounting.* (New York: Appleton. 1912. \$1.)

MACKENZIE, M. A. *Interest and bond values.* (Toronto: University Press. 1912. Pp. 94. \$2.)

MONTGOMERY, R. H. *Auditing: theory and practice.* (New York: Ronald Press Co. 1912. Pp. xxix, 673.)
To be reviewed.

PARKHURST, F. A. *Applied methods of scientific management.* (New York: John Wiley & Sons. 1912. Pp. xiii, 319. \$2.)

Presents in detail the conditions established in the plant of the Ferracute Machine Co., makers of presses and dies, at Bridgetown, N. J., after the principles of scientific management were applied. It is clearly and attractively written. Its chief value to persons who are interested in the principles of scientific management, but who do not clearly perceive their significance, rests in the concrete picture presented.

E. D. J.

SEARS, J. H. *Trust estates as business companies.* (St. Louis: Counselors Pub. Co. 1912. Pp. xxi, 387. \$5.)

SHELDON, A. F. *The science of efficient service; or, the philosophy of profit-making.* (Chicago: The Sheldon School. 1912. \$1.)

SLATER, J. A., editor. *Pitman's commercial encyclopaedia and dictionary of business.* Four volumes. (New York: Pitman. 1912.)

SMITH, C. W. *Unnatural prices.* (London: King. 1912. 1s.)

SPEAR, R. H. *Scientific auditing.* (Detroit: Commercial World Pub. Co. 1912. Pp. 63. \$1.)

STAFFORD, J. *How to make money.* (London: Swift & Co. 1912. 1s.)

WHEELER, G. W. *Bookkeeping for beginners.* (London: Gee & Co. 1912. Pp. 39. 1s. 8d.)

WILLIAMSON, J. G. *Counting-house and factory organisation.* (London: Pitman. 1912.)

— *Cyclopedia of practical accounting.* (Chicago: American Technical Society. 1912. \$12.80.)

— *Poor's handbook of investor's holdings.* 1912 edition. (New York: Poor's Railroad Manual Co. 1912. \$15.)

Capital and Capitalistic Organization

Concentration and Control: A Solution of the Trust Problem in the United States. By CHARLES R. VAN HISE. (New York: The Macmillan Company. 1912. \$2.00.)

In this readable volume of modest dimensions and hopeful spirit, President Van Hise has furnished to the general reader as well as to the student of economics an admirable handbook. His painstaking examination and orderly presentation of the facts concerning nearly thirty separate industries, their capital, output, growth, and tendency to combination, are as useful as they are fair. As to the facts of the case, the book deserves a place beside Professor Wyman's admirable compendium of the law. With these two volumes at hand, those who advocate the regulation rather than the destruction of legitimate industrial combinations, will find ready support for their doctrine.

President Van Hise makes out a strong case for regulation not of monopoly but of powerful industrial combinations, which to him seem inevitable. Monopolies are not to be tolerated.

If a corporation be found to be a monopoly and therefore to be unreasonably in restraint of trade the commission should give the orders as to the modifications of the business which are necessary so that the corporation shall cease to be a monopoly. Such orders might go to the extent of disintegrating the existing organization, if the monopoly be such that the public interests cannot be adequately protected without such action.

He suggests that no corporation should be permitted to control more than a specific percentage, say from 40 to 60 per cent, of any line of business of the country, that rule to apply to the

corporation not only as a whole but to each of the lines of business which may be covered by it. This in substance is the contention of Mr. Bryan which was effectively challenged by Governor Hughes in his Youngstown speech in 1908. It does not seem as philosophically reasonable as the test proposed by Professor Clark, who says:

The key to the situation is the position of the consumers rather than that of the producers. Has every consumer a choice of efficient and independent producers to buy from? If so, there is no monopoly even if one combination should control three-quarters of the output.

But, whatever view be taken, President Van Hise is no friend of monopoly. His policy of governmental regulation is to be applied to combinations free or already purged of monopolistic qualities.

He sets out at much length the wastes of competition and the advantages of combination, to which he might have added at page 16, as subdivision (i), the very important proposition that the combined capital constitutes a safeguard against insolvencies and consequent panics; disasters which were frequent and familiar in the period of many small and warring factories.

Combinations he regards inevitable and in many ways desirable. Prohibitions for more than twenty years in state and union alike have failed to preserve competition in price, or what he considers quite as important, competition in quality or in service. Therefore he would resort to regulation by administrative commission, preferably federal. His declaration to this effect was written in the spring of 1912 at a time when, to quote Professor Clark, "the need of such a body is probably the one thing on which the various plans now before the people are most generally agreed." With the progress of the recent presidential canvass, difference of view was developed and the favor originally shown towards regulation by governmental commission was maintained principally by Colonel Roosevelt. It was disconcerted by Governor Wilson, and by his adviser, Mr. Brandeis. In debate with the last-named gentleman on November 1, upon the subject Regulation of Competition versus Regulation of Monopoly, President Van Hise adhered to the position taken in this volume which may be summarized best in his own words:

Competition should remain free in all respects, in regard to price, quality and service. The inefficiency which frequently goes with monopoly and other evils in the same connection give adequate ground for breaking up all monopolies. The movement for concentration and

coöperation in business is a world-wide tendency in this twentieth century. To attempt to overcome it by restrictive legislation and acts of the court is futile. No one will advocate returning to the condition of very numerous small manufacturers. We must have that degree of concentration which will give the greatest efficiency.

This then is the core of his argument. Efficiency! No monopoly, for that limits efficiency and injures the public. Freedom for combination and coöperation, without monopoly, but under governmental control to observe and to prevent any developing tendency toward unfair practices or public injury. For such work the courts are not equipped and therefore it should be carried on by an administrative commission.

Upon the question of remedial legislation four points are presented as essential to any new legislation: (1) a declaration that by restraining trade to such a degree as to control the market a business by that fact becomes of public interest; (2) a definition of reasonable restraint of trade in such manner as to permit co-operation; (3) a declaration that any restraint of trade is unreasonable that does not permit free competition; and (4) a prohibition of unfair practices, such as are enumerated and indicated on pages 225-226. Seven other points are presented as calling for consideration and possible adoption: (1) requirement of publicity; (2) price regulation; (3) conservation of natural resources; (4) conduct of business in accordance with good social conditions; (5) payment of fair wages; (6) if advisable, *sed dubitante*, the limitation of issues of stocks and bonds; and (7) the delimitation of the powers of the state and the nation. Some points of control suggested by others are stated (pp. 266-268) but without argument, approval, or disapproval.

The entire discussion is instructive and such as may be welcomed by those of any previous disposition. Its tone and temper fully justify the confidence generally reposed in the ability and impartiality of President Van Hise. In view of the presidential discussion, a second edition of the work, somewhat more precise in statement, and dealing more fully with objections would be of value. Before the adoption of the plan for administrative regulation of industrial combinations, it is probable that there will be opportunity for ample and exhaustive discussion.

Some errors though unimportant may be noticed. It is true, as stated on page 21, that "the General Corporation Act of New York was passed in 1848" and that "similar acts were later passed in other states," but these were only later modifications of

earlier acts. The first and model act of general incorporation was that passed in New York, March 22, 1811. It was followed in many other jurisdictions, notably Massachusetts in 1836, Connecticut and Michigan in 1837, Indiana in 1838, and Great Britain in 1862. It is not strictly accurate to say that "under the common law the stock of one corporation could not be held by another." In England, the home of the common law, a company can buy and hold shares in another company if so provided in its articles of association and such is the rule also in several of the American states. Indeed, almost everywhere a corporation can take such stock in payment of a debt, and often the stock of a corporation whose products it needs for its own legitimate purposes. Such was the law of New York from 1853. The extent of this stockholding power and its limitations cannot be stated summarily.

But the mistakes in this volume are so few and the excellencies are so many and so great, that there is little occasion for criticism and abundant opportunity for cordial acceptance of the work of President Van Hise.

FRANCIS LYNDE STETSON.

Big Business and Government. By CHARLES NORMAN FAY.
(New York: Moffat, Yard and Company. 1912. Pp. vi, 201. \$1.00.)

Mr. Fay's work, according to his own statements, is intended to give the public in brief and simple words, specific instances showing "how and why business grows big—how far it controls the market and what have been the actual net results to hated Wall Street and our beloved selves of the so-called 'gigantic monopolies' which have so long and well served as stock in trade for politicians and the reformer of other men's misdeeds." In accordance with this purpose, Mr. Fay's book is devoted to incidents illustrating the tactics of the big corporations and the methods which have been followed by the so-called independents in their struggle to maintain themselves.

From personal experience, the author shows how a small company in Northern Michigan outwitted the Powder Trust; how the Chicago Telephone Company established a monopoly in Chicago and after the combination advanced the rates without incurring public hostility; how the Chicago Gas Trust Company was formed, legally dissolved by the Illinois courts, and almost

immediately revived by special act of the legislature, and, it is intimated, was the source of a jack-pot of \$200,000 for distribution among the politicians. He also shows how the Typewriter Trust was formed, how the new independents grew up beside it and destroyed the monopoly which was formed by the combination. He relates some interesting incidents showing Carnegie's remarkable foresight and ability as a manager. He then selects a group of the leading industrial corporations and divides them into classes according to their success, as shown in dividends on the common stock. From this investigation, he concludes that only those corporations which have been managed with consummate ability, have been able to achieve financial success. Monopolistic control of industry through combinations, he concludes, has been a gigantic failure. Special privileges are but examples of keen business management. In general the so-called trusts achieve success because of efficiency and power in competition. The tariff, however, has, in his judgment, been an important factor in the development of monopolistic combinations. The labor trusts have failed to corner labor as the industrial trusts have failed to corner the market.

Mr. Fay's conclusions would be re-assuring to the conservative citizen but for the fact that he is continually calling attention to the economic waste brought about by the system which he describes and advocates. For this reason, his book is likely to strengthen the views of those who believe in corrective legislation rather than of those who believe in the return to the conditions of unregulated competition.

MAURICE H. ROBINSON.

University of Illinois.

A Comparative Study of the Law of Corporations, with Particular Reference to the Protection of Creditors and Shareholders. Columbia University Studies in History, Economics and Public Law, Vol. XLIX, No. 2. By ARTHUR K. KUHN. (New York: Longmans, Green and Company. 1912. Pp. 173. \$1.50.)

This monograph is the result of a research conducted at Columbia University under the auspices of the Legislative Drafting Association. It contains chapters on corporations in ancient times, in the Middle Ages, and in England. The main part of the work is, however, devoted to a careful critical analysis of the pro-

tection afforded to creditors and shareholders in France, Germany, Italy, Spain, and Switzerland, considered under the three heads of Organization, Operation, and Dissolution. Following each of these chapters, it discusses the legislative and reform movements on the same topics in England and America.

The purpose of the work is to show how much more completely and carefully England and the continental countries have in general protected the interests of those financially connected with corporations than has the United States, and to suggest a working program for the reconstruction of a corporation law in the United States.

There is an excellent bibliography and a complete index. However, it occasions surprise that in a work containing so complete a list of authorities, no mention is made of the contributions of Pollock and Maitland in their *History of the English Law*, or of Mommsen's incomplete work, *Zur Lehre von den römischen Körporationen*, first published in the "Zeitschrift der Savigny," and later included in Mommsen's miscellaneous works.

MAURICE H. ROBINSON.

NEW BOOKS

BARNES, V. E. *A Progressive's reasons why Uncle Sam cannot protect his people from the extortion of the trusts and combines, and the remedy.* (New Haven, Conn.: Tuttle, Morehouse & Taylor Press. 1912. Pp. 109.)

DOWNEY, E. H. *Regulation of urban utilities in Iowa.* Reprinted from Vol. I. of the Iowa applied history series. (Iowa City: State Historical Society. 1912. Pp. 174.)

FONTAINE, A. and others. *La concentration des entreprises industrielles et commerciales.* (Paris: Alcan. 1912. 3.50 fr.)
To be reviewed.

GOTTHARDT, G. *Die verschiedenen Formen der Handels-Gesellschaften in ihrer wirtschaftlichen Bedeutung.* (Berlin: Franz Vahlen. 1912. 2.20 m.)

HERRMANN, E. *Auslese und Anpassung der Arbeiterschaft der geschlossenen Grossindustrie.* (Munich: Duncker & Humblot. 1912. 1.80 m.)

HILLS, A. S. *The origin, growth and work of public utilities commissions.* (New York: A. S. Hills. 1912. Pp. 17. Gratis.)

LIA, A. *La forza idraulica, gli impianti idioelettrici e l'imposta fabbricati.* (Tivoli: Maiella. 1911. Pp. 96. 3.10 l.)

MEADE, E. S. *Corporation finance.* New edition, revised and enlarged. (New York: Appleton. 1912. \$2.)

MULHAUPT, E. *Der Milchring. Ein Beitrag zur Kartell- und Milchpreisfrage.* Volkswirtschaftliche Abhandlungen der badischen Hochschulen, 9. (Karlsruhe i.B.: G. Braun. 1912. Pp. 111.)

MOLLER, W. *Das Reichspetroleummonopol. Betrachtungen über die Voraussetzungen, die Organisationsfragen und die Wirkungen.* (Berlin: C. Heymann. 1913. Pp. 68. 1 m.)

SCOTT, W. R. *The constitution and finance of English, Scottish, and Irish joint-stock companies to 1720.* Vol. I. (New York: Putnam's. 1912. Pp. Ivi, 488. 17s.)

STEVENS, W. S. *Industrial combinations and trusts.* (New York: Macmillan. Pp. xiv, 593. \$2.)

STRAUSS, F. *The relation between capital and rates; an address delivered at the University club, New York, March 7, 1912.* (Buffalo: The Matthews Northrup Works. 1912. Pp. 20.)

Labor and Labor Organizations

Attitude of American Courts in Labor Cases. By GEORGE GORHAM GROAT. Columbia University Studies in History, Economics, and Public Law, Vol. XLII. (New York: Longmans, Green and Company. 1911. Pp. 400. \$2.50.)

The predominant impression gotten from Groat's treatment of the trade-union law cases, is that irreconcilable diversity of opinion characterizes the decisions which have been rendered by the courts. This confusion extends even to the use of such terms as strikes, boycotts, threats, and intimidation. As to general statements on the rights of labor and capital, much less divergence exists, but some general statements lack both consistency and practicability. The courts are, however, Groat believes, slowly making progress toward the solution of the problems presented in trade-union law. No court now dares question the right of laborers to organize, although it may deny the means to make organization effective. Even more encouraging is the tendency toward eliminating the element of combination and the purposes aimed at, as being material in determining the legality of labor-union activities.

Groat boldly criticizes the courts for failing to adjust their decisions to present-day economic conditions. He views the problem of trade-union law as primarily a matter of public policy and expediency, rather than a study in legal precedents inherited from another age. All reference to the absolute rights of either party in industrial disputes is considered confusing verbiage; reform must come through recognizing that labor must be con-

ceded the right of organization, and the means of rendering it effective.

While recognizing that not all courts use such terms as strikes and boycotts in the same sense, Groat does not point out that much of the contradiction as to the legality of these trade-union activities is due to the different meanings the courts give to these terms; nor does he make any attempt to analyze by states the differences in the decisions upon trade-union law. He fails to recognize that some courts have been consistently friendly toward labor-union activities. On the contrary, he urges that the tendency is for a liberalization of trade-union law, because a number of progressive courts have recently rendered decisions favorable to labor. Had an effort been made to analyze these decisions by states it would have been apparent that no change of opinion was involved in these recent progressive decisions, and that the latest utterances of the courts which have held against labor are no more advanced than have been the earlier ones.

The author is not consistent in his statements as to the role played by the element of motive in trade-union law cases. In the chapters upon the law as to strikes, boycotts, and closed-shop contracts, the impression is conveyed that the chief reason for differences of opinion is divergence as to the question whether a malicious motive renders an otherwise legal action unlawful. In the chapter upon Special Topics, however, the view is presented that motive is quite immaterial in trade-union law. Nor is sufficient emphasis given to the theory that the right to do business is property in trade-union law. The quotations from cases which he makes constantly emphasize the loss of profits the employers have sustained, and on pages 205-210 he discusses the view advanced in several New Jersey cases, that "probable expectancy" of business profits gives warrant for action when interference takes place, as if this were a new doctrine. It is clearly, however, nothing more than an elaborate statement of the view long held that the right to do business is property. The discussion fails to include the remedies which the courts command in dealing with unlawful labor combinations. Nowhere is it clearly shown how the courts apply the doctrines of conspiracy and malice to combinations of capital. Only incidentally does the author touch upon the Sherman anti-trust law in its application to labor. Groat's treatment of trade-union law is not exhaustive, as, indeed, he does not claim it to be.

In the chapters on the attitude of the courts towards the constitutionality of labor legislation, the distinction between social justice and civil justice is consistently applied and well worked out. The author shows precedents where some courts, especially the Supreme Court of the United States, have recognized these principles, but only in cases where the actual conditions have been brought before them by counsel in such abundance that they recognize them as "matters of general knowledge." The criticism of the courts, therefore, falls back on the lawyers and referees who have not had the training adequate to assemble and present the facts of these new and actual conditions, and who, therefore, like the courts, rely upon such precedents as they can find. Even with this array of facts, some of the courts resort to their antiquated notions of liberty. In this predicament the only remedy is the slow and usually impossible amendment to the Constitution. But then, "constitutional amendments are not necessary. All that is needed is to have the new meaning read into the present phrases." The predicament then resolves itself into either the social and economic training of the lawyers, or the more rapid methods of amending the constitutions. Groat seems to take the former view. He does not attach much importance to the device of commissions composed of both lawyers and laymen with power to investigate and make conclusive findings of the facts.

JOHN R. COMMONS.

Le Mouvement Syndical. By SYLVAIN HUMBERT. (Paris: Librairie Marcel Rivière et Cie. 1912. Pp. 100. 0.75 fr.)

This little volume is one of a series of eleven volumes published in 1912 under the general title *Histoire des Partis Socialistes en France*. The series is a history of the socialist ideas and socialist parties in France since the Great Revolution. Only one volume, however, is devoted to the period from 1789 to 1871; all the others treat of the various phases of French socialism since the Commune. The editor, M. Alexander Zévaès, belonged at one time to the Guedist party—the most orthodox Marxian party in France—but is now a member of the Republican-Socialist party, which was organized in December, 1911, by socialistic groups and factions which could not or would not join the generally recognized Socialist party. The program of the Republican-Socialist party is a mixture of collectivist and individualist ideas and propositions which are to be carried out peacefully and gradually.

M. Humbert's volume is practically a resumé of the salient facts of the syndicalist movement in France. It touches on the significant dates, on the statistics of the movement, on the methods of the *Confédération Générale du Travail*, on the struggle of ideas in the movement, on the syndicalist press, but "touches" merely. The author does not treat his subject adequately, probably because of lack of space. The historical perspective is lacking, and hardly any analysis of the conditions which stimulated the growth of French syndicalism can be said to have been given. No new point of view is developed, no new facts are brought out, and the booklet can hardly be considered a contribution to the literature of the subject. The best that may be said for it is that as a resumé of the syndicalist movement it may refresh the memory of those who take the trouble to read it.

LOUIS LEVINE.

Die deutschen Wanderarbeitsstätten. By EPHREM RICKING. (M. Gladbach: Volksvereins-Verlag. 1912. Pp. 148. 2.50 m.)

For thirty years there has progressed in Germany a movement for the protection of workmen who wander in search of employment. They are received in special stations from which they may go out, after working for their board and night's rest, to try the chances of more settled employment in the neighborhood. The author of the present succinct study reviews the history of this movement, laying emphasis upon the labors of its ardent chief supporter, the late von Bodelschwingh (one of the most interesting characters surely in recent German social history), and finding a chief milestone in the Prussian law of 1907. This law gave to the provincial governments the right to compel the establishment of public stations for wanderers; several important governments have seen fit to enact ordinances accordingly; others are making further study.

Opinion in Germany is not at one concerning the utility of the *Wanderarbeitsstätten*. Yet their sponsors have considered the Prussian law successful and many have urged that an imperial law of similar intention be enacted. Their desire in this respect the author shares. Not detracting from the actual accomplishment of the efficient systems of public labor exchanges and of the labor colonies, he yet argues that neither of these is so well fitted to connect employer and workman for some tasks as is a regulated and safeguarded plan of wandering.

An appendix to this convenient volume supplies pertinent texts of ordinances, statistical tables and other matters. There is a good bibliography. The literature in English upon the subject of the book is most meager; little better is at hand than brief sketches in the pages of Schloss, Bliss, and Dawson.

ROBERT F. FOERSTER.

NEW BOOKS

ARTAUD, A. and others. *De la sanction par l'autorité publique des accords entre chefs d'entreprises industrielles et commerciales pour l'amélioration des conditions du travail.* (Paris: Alcan. 1912. 1 fr.)

BULLOCK, E. D., compiler. *Selected articles on the employment of women.* Debaters' handbook series. (Minneapolis: H. W. Wilson Co. 1911. Pp. xviii, 147. \$1.)

CLOPPER, E. N. *Child labor in city streets.* (New York: Macmillan. 1912. Pp. vii, 280, illus. \$1.25.)

COLLET, C. E. *Women in industry.* (London: The Women's Printing Society. 1912. Pp. 20. 3d.)

DAWBARN, C. J. C. *Workmen's compensation appeals.* (London: Sweet & Maxwell. 1912. 8s. 6d.)

DOWNEY, E. H. *Work accident indemnity in Iowa.* Reprinted from Iowa applied history series, Vol. I. (Iowa City: State Historical Society. 1912. Pp. 80.)

HARLEY, J. H. *Syndicalism.* (London: Jack. 1912. 6d.)

HOFFMANN, L. *La grève dans les services publics et les industries nécessaires.* (Paris: Bloud et Cie. 1912. 0.60 fr.)

KELLERSHOHN, M. *Le syndicalisme chrétien en Allemagne.* (Paris: Bloud & Cie. 1912. Pp. 3.50.)

KROPOTKIN. *Fields, factories and workshops.* (London: Nelson. 1912. 1s.)

KURUCZ-ECKSTEIN, H. *Geschichte der Gewerkschaftsbewegung in Frankreich 1789-1912.* (Stuttgart: Dietz. 1912. Pp. 317.)

PORTENAR, A. J. *Organized labor; its problems and how to meet them.* (New York: Macmillan. 1912. Pp. vii, 184. \$1.)

The subtitle indicates the scope and purpose of this little book. The author is an organization man, and makes a direct appeal to union men rather than to the general public. His point of departure is the McNamara case, and his plea is that all violence shall be avoided by union members and sympathizers. He holds that syndicalism, *sabotage*, and the unceasing war formed by the Industrial

Workers of the World, are not only wrong but inexpedient. Constructively the writer has nothing new or striking to propose; but his advocacy of more complete coöperation within the union, and of the taking over of the training of apprentices by the unions is worthy of note. The book is well written, and the author's sincerity of purpose, clarity of reasoning, and firm grasp of fundamental economic principles will make a strong appeal to the intelligent and unbiased reader, whether he be a union man or not.

C. W. D.

RAYNAUD, B. *Vers le salaire minimum. Etude d'économie et de législation industrielles.* (Paris: Larose & Tenin. 1913. Pp. 518. 14 fr.)

To be reviewed.

ROUGE, C. *Les syndicats professionnels et l'assurance contre le chômage.* (Paris: Rivière. 1912. 5 fr.)

RUSSELL, E. T. *The conflict between capital and labor; a fair, candid and impartial treatment of the subject from a non-partisan and Christian standpoint.* (Washington: Review and Herald Pub. Assoc. 1912. Pp. 208. 50c.)

SANDERSON, W. J. *The industrial crisis.* (London: Siegle Hill. 1912. 6d.)

SCHWITTAU, G. *Die Formen des wirtschaftlichen Kampfes (Streik, Boykott, Aussperrung usw.).* (Berlin: Springer. 1912. Pp. xi, 490. 12 m.)

SNOWDEN, P. *The living wage.* (London: Hodder & Stoughton. 1912. Pp. 189. 1s.)

TALBOT, W. *A select bibliography of recent publications on the helpful relations of employers and employed.* (Cleveland, O.: Winthrop Talbot. 1912. Pp. 112. \$1.)

VOGEL, C. *Einkommen der Handwerker im Stadtkreis Hannover.* (Jena: Fischer. 1912. Pp. viii, 81, vii. 3 m.)

WARE, F. *Causes of labour unrest.* (London: Arnold. 1912. 5s.)

WATNEY, C. and LITTLE, J. A. *Industrial warfare: the aims and claims of capital and labour.* (London: Murray. 1912. Pp. 364. 6s.)

WEBB, S. and FREEMAN, A., editors. *Seasonal trades.* (London: Constable. 1912. Pp. x, 410. 7s. 6d.)

Report on changes in rates of wages and hours of labour in the United Kingdom in 1911 with comparative statistics for 1902-1910. (London: Wyman. 1912. Pp. 159. 8d.)

Report on strikes and lockouts and on conciliation and arbitration boards in the United Kingdom in 1911 with comparative

statistics for 1902-1910. (London: Board of Trade, Labor Department. 1912. Pp. 204. 10d.)

Liste systématique des journaux syndicaux. (Brussels: Bureau de la Société Internationale. 1911. Pp. 63.)

Money, Prices, Credit, and Banking

Report of Commission on the Cost of Living in New Zealand, together with Minutes of Proceedings and Summary of Evidence. (Wellington: Government Printer. 1912. Pp. cxxxvi, 510.)

The Commission on the Cost of Living in New Zealand assembled on May 31, 1912, and reported within three months. It was given thirteen definite questions to consider relating to the increase of the cost of living in New Zealand during the past twenty years: the direction of the increase, comparative price changes in other countries, changes in the standard of living, the role played by monopolies, the tariff, land, foreign trade, labor legislation, gold production, movements of population, or other causes in increasing the cost of living and the steps to be taken to reduce the cost of the necessities of life.

In answering these questions the commission did not collect new data, but assembled and presented the results of the most reliable investigations. The data for New Zealand consist mainly of McIlraith's indices of wholesale prices of 45 commodities for the period 1860 to 1911, and 69 budgets of family expenditure collected in 1910-1911 by the "Journal of the Department of Labor." The well-known indices of prices of the United Kingdom, France, Germany, the United States and Canada are compared with those of New Zealand. The intellectual temper of the commission is shown by the nature of the authorities most frequently quoted, *e.g.*, Marshall, Bowley, Hooker, and Fisher.

The findings of the commission may be summarized as follows:

(1) Since 1894-1896 wholesale prices in New Zealand have increased about 20 per cent. (2) The greatest increase has been in foodstuffs—about 35 per cent. "Many articles of food are short in the reputed weights and measures." (3) "The rise in the cost of living, due to the increase of the prices of the articles in the uniform 'schedule of living,' has been considerably less in New Zealand than in the United States, Canada, and Germany, and appears to have been approximately the same as in the United Kingdom, but higher than in France." (4) The commission holds

"that the increased gold-supplies of the world have assisted both directly and also indirectly, through credit money, to raise the general level of prices, and the rise in the cost of living is partly the effect of the rise in general prices." Fisher's *Purchasing Power of Money* is quoted with approval. (5) The increase of wages in New Zealand for the last twenty years has been greater than the increase in prices.

The commission found that certain combinations existed for fixing selling prices, but remarked that "the experience of America does not make us too sanguine as to the benefits to be derived from legislative action." Data were produced "which show that in New Zealand prices of articles placed on the free list fell considerably during the period of rising prices." The labor legislation enacted in New Zealand during the last three years has improved the condition of laborers, but whether efficiency has increased in output per man cannot yet be definitely decided from the evidence.

The commission names twelve causes of the increasing cost of living, assigning the chief place to "the increased supply of money, including gold and credit, and the increased velocity of circulation." Among the recommendations of the commission, the most significant is that in favor of the representation of New Zealand on the proposed International Commission on the Cost of Living.

The New Zealand report is far superior to anything that has appeared on the subject thus far in the United States.

WARREN M. PERSONS.

Colorado College.

Theorie des Geldes und der Umlaufsmittel. By LUDWIG VON MISES. (Leipzig: Duncker und Humblot. 1912. Pp. xii, 476. 10 m.)

The work under review apparently represents an effort to develop a theory of money which will be in accord with the utility theory of value in its most extreme subjective applications. The process has been chiefly one of excision, in which much of current monetary principle and practice has been pruned away. The failure to recognize the general limitations upon the utility theory detracts from the merit of the work, while the thoroughgoing application of this theory in all of its detail leads to mainly negative results.

The starting point is, of course, the general theory of value.

Here the author presents and elaborates all of the refinements of objective exchange-value, subjective exchange-value, and subjective use-value (pp. 99-100). While exchange-value is more prominent in modern economic organization, yet from the social point of view, objective exchange-value leads back to a subjective use-value as the real origin of the condition or fact of value. In the case of money, however, such reference to a subjective use-value is not made, and the only form which is manifested by the medium of exchange is that of objective exchange-value. The task of the theory of money is to formulate the laws of the objective exchange-value of money, that is, of its purchasing power (pp. 106-107). The most important attempt at the formulation of such a law has been in the so-called "quantity theory of money." While this theory contains a germ of truth in the proposition that the demand for and the supply of money are conditions which affect its value, it does not afford an adequate explanation of the value of money. It explains changes in the value of money, but does not account for this value itself. Further, even the quantity of money in a community is determined by subjective forces. Each individual will require a stock of money which will be conditioned by the organization of the whole social productive and exchange apparatus. This apparatus can only motivate the individual, however, and cannot affect directly the concrete level of the money demand, which is dependent upon the subjective considerations of the individual. Two communities, under exactly similar objective environments, may maintain different stocks of money, owing to the differing subjective estimates which prevail as to the advantages or disadvantages of a large supply. The mechanical conception of the relation of the quantity of money to its value is combatted, and the contention advanced that the extent to which a change in the money supply will affect its value will depend solely upon the subjective value scale (*Wertskala*) of the individual (p. 155). That is to say, an increase in the quantity of money can affect its value only by affecting the marginal utility (*Grenznutzen*) of money to the individuals who comprise the community (p. 151).

The problem of measuring changes in the value of money presents difficulties also, which to the author are well-nigh insurmountable. All of the factors which enter into the determination of price operate only through the subjective valuations of the individual, and these factors cannot be measured. The index

number may be of some use in ascertaining objective use-value, though this is of relatively little significance, compared with the subjective significance of a given money quantity (p. 221). As an agency for historical and statistical investigations into prices, the index number may render a useful service; but it is of no significance for the development of the theory of the value of money (p. 217). A proposal recently made to use the budgets of a number of individuals for the construction of an index number based upon the real incomes of these persons, is given greater approval than the index number based upon price quotations, though the practical difficulties in the way of a proper application of the principle are recognized (p. 219).

So much for the point of view in this book. The attempt at a psychological basis for economic theory may be pleasing to some, but to the reviewer it appears to be relatively futile. Granted that in a certain sense the roots of these theories run down into the unknown strata of self, an overemphasis of these vague unknowable origins negatives all theorizing. Behind the phenomena of price may lie certain real but intangible subjective considerations which are indeterminable, and hence unmeasurable. But there are certain external objective phenomena of price which may be known, recorded, and studied; and on the basis of these objective manifestations safe conclusions may be drawn regarding the course of prices and its relation to human welfare. What further object is there to be attained? The elaborate refinements of the extreme devotee of the psychological school appear to confuse rather than to clarify useful thinking in the field of economics proper.

H. L. LUTZ.

Oberlin College.

Der Zinsfuss seit 1895. By HEINRICH BICHMANN. (Berlin: Puttkammer und Mühlbrecht. 1912. Pp. 154. 5.20 m.)

Instead of trying to take any one rate as the usual or general rate of interest, such as the rate on first mortgages or Imperial bonds, the author outlines the course of the interest rate on all the more important classes of loans. The discussion includes the official rate of discount (the Reichsbank rate); market or private rate of discount; rate of interest on short-term agricultural and commercial credits, such as those made by the Raiffeisen and Schulze-Delitsche societies; the yield of the most stable bond

issues, imperial, communal, municipal, and certain classes of corporation bonds; and finally the rate of interest on first mortgages and debentures issued by the Landschaften in Germany. The whole epoch from 1895 to the present day is divided into four periods: (1) 1895-1900, in which the interest rate increased; (2) 1900-1902, in which the interest rate declined; (3) 1902-1907, in which the interest rate increased rapidly reaching its highest point in the panic year 1907; and (4) 1907 to the present time, in which there has been a readjustment of the exceptionally high rates of 1907.

In a brief preface the theory of interest, the method of determining interest, and the different kinds of interest are presented (pp. 7-12). The three main chapters of the book discuss the interest rates on (1) short-time loans (pp. 15-80), (2) various classes of bonds (pp. 80-134), and (3) mortgages (pp. 135-137). The last part of the book is devoted to a rather long summary (pp. 137-152).

The rise in the interest rate on all classes of loans during the greater part of the period is ascribed to the extraordinary growth of the demand for capital in Germany (p. 151). Business depression in 1900-1902 and again in 1908-1910 caused a temporary fall in the interest rates; but in general the demand for capital increased more rapidly than the new production of capital. About the year 1895 a period of great business activity developed in Germany. The introduction of electrical power brought a demand for copper, iron and steel, coal, and other raw products; and led to the stimulation of business along all lines. Cartels and large corporations were formed. The steady growth of trade and production brought a demand for loan capital to meet the current needs of business. Again new investment opportunities both at home and abroad flooded the market with high-grade bonds. The Spanish-American, Transvaal, and Russo-Japanese wars; railroad building in the Balkan States and in the colonies; the development of municipal and communal enterprises; the "ever-widening functions of the Imperial government"; and the growth of large corporations supplied the market with bonds issued against ample security which tended to force down the price and increase the yield.

The appendix contains a large number of interesting and valuable tables and diagrams. These take up such items as: the Reichsbank rate of discount, consumption and prices of important

raw materials, bond issues since 1894, new flotations of joint-stock companies, German and foreign gold reserves, and tables showing the monthly and yearly prices of various classes of bonds.

The book is timely, well planned and organized, and places before the reader an abundance of evidence relating to the factors which influence the interest rate. The investigation is limited to Germany; the bibliography is entirely German; and the point of view is German. Inasmuch as the panic of 1907 in the United States played such an important part in fixing the high rates of that year, it seems to the reviewer that the author would have been able to obtain a fairer perspective and to discuss more pointedly the influence of the panic upon Germany (pp. 57-61) if he had consulted the wealth of material in English.

EVERETT WALTON GOODHUE.

Colgate University.

Untersuchungen über Preisbildung: Ueber Gestechungskosten im Buchdruckgewerbe. By T. FRANCKEN; *Einfluss der Konjunkturen auf die Preisentwicklung der unedlen Metalle und der Steinkohlen seit 1890.* By L. HERTEL; *Die Preisgestaltung der inländischen Braunkohlen seit 1890 in den Oberbergamtsbezirken Bonn und Halle.* By J. SCHRADER. Schriften des Vereins für Sozialpolitik, Vol. 142, Part 1. (Leipzig: Duncker und Humblot, 1912. Pp. 251. 6 m.)

Untersuchungen über Preisbildung: Die Verteuerung der Lebensmittel in Berlin im Laufe der letzten 30 Jahre und ihre Bedeutung für den Berliner Arbeiterhaushalt. By GUSTAV BRUTZER. Schriften des Vereins für Sozialpolitik, Vol. 139, Part 2. (Leipzig: Duncker und Humblot. 1912. Pp. 88. 3 m.)

Die Preissteigerung des letzten Jahrzehnts. By FRANZ EULENBURG. (Leipzig: B. G. Teubner. 1912. Pp. 96. 2.40 m.)

Il Movimento dei Prezzi e dei Salari nell'Anno 1911 a Trieste. By MARIO ALBERTI. Pubblicazioni del Museo Commerciale. (Trieste: E. Vram. 1912. Pp. 114.)

Die Fleischversorgung der Grossstädte unter besonderer Berücksichtigung der Preisbildung und Preisentwicklung, dargestellt auf Grund der Verhältnisse der Stadt Cöln. By FRITZ ROTHE. (M. Gladbach: Volksvereins-Verlag. 1912. Pp. 144. 3 m.)

The Verein für Sozialpolitik—the German association of econo-

mists—has undertaken the publication of a series of studies on prices, with the view of showing the factors which are responsible for the present rise in price levels. Sering, of Berlin, is the editor of the series on agricultural products, and Eulenburg, of Leipzig, is in charge of that on industrial products.

Dr. Francken's study of prices in the printing industry follows a comparatively simple plan; he has taken an outline analysis of costs in factory industries from a special study on that subject, and has then compiled the available information for the printing industries under each of the captions in the cost analysis. Thus the principal raw materials are paper, type-metal, ink and coal; a chapter is devoted to each of these, showing the price tendencies and giving comparisons both for earlier periods and for the leading countries. The most interesting feature of the study is the evidence concerning the extent to which the industry has been organized in the effort to regulate prices and trade conditions. There is a cartel in the paper industry and coal industry; the printing workmen have a national union which practically controls the labor supply, while their employers are combined in an association which includes all the important establishments, and the two organizations work together under a long-term trade agreement; finally the booksellers' association regulates the retail distribution of the finished product. The author has given an interesting review of the various factors in the industry of book printing; the study, however, lacks head and tail, and one concludes the reading of the hundred pages with the feeling that while the author set out to investigate the price elements in this industry, he had found so much collateral information of interest that he has almost concealed the real point of his study.

The second part of the volume is a study by Dr. Hertel on the development of the prices of the non-precious metals and of hard coal since 1890. The articles included are pig iron, hard coal, copper, lead, tin, and zinc; the statistical tables give the production and prices for the four periods 1891-1894, 1895-1900, 1901-1903 and 1903 to date. A series of charts show the price curve for each of the metals in each of the leading countries. The author's conclusions, namely, that speculation and artificial control of prices by pools and syndicates affect prices only temporarily, and that price variations are the result of changes in supply and demand, seem rather obvious.

Dr. Schrader's contribution on the prices of soft coal in the

mining districts of Bonn and Halle forms the third part of the volume. These two areas in 1910 produced about 80 per cent of the soft coal production of the empire. This study also follows the plan of first outlining the elements which compose the price of coal, and then discussing these items *seriatim*. The chapters on wages and on marketing methods impress one as careful pieces of work.

For the American reader, the value of these three studies consists not so much in the information on prices, though the price data have been fully and clearly presented, as in the light they throw on the efforts of the producers in these industries to influence prices through organizations of various kinds. The policy of the present administration in the United States of dissolving such organizations is in striking contrast to the German policy of toleration.

According to Brutzer, wages have risen more rapidly than the cost of food in Berlin during the period 1881 to 1910. This conclusion is derived by comparing the cost of food for a typical family of four, with the income statistics of wage-earners, in the city of Berlin. The author begins by stating that as part of a world movement, the price of the necessities of life had risen to a considerable extent in recent years, and that this rise had occurred at the same time that the wage-earner was persistently endeavoring to raise his standard of life. While the conclusion of the author is optimistic, he is careful to state that items other than food, such as rent, taxes, etc., have also risen.

The methods followed in this study are simple and direct; recent investigations of the cost of living in Berlin showed an expenditure of over 50 per cent of the workman's income for food, and that the most important items of food were meat, bread, and milk. The price movements of these articles are carefully presented, and an effort is made to show the elements forming the price at the present time, as the sources of supply, the cost of transportation, and the cost of marketing are given for each article. More efficient methods of manufacture, and especially the use of co-operative measures among the small producers, would materially reduce some of the costs of production.

Professor Eulenberg has given in his monograph a very readable survey, not only of the rise of prices in the last decade, but

also of general price movements since 1850, together with his views as to the probable future course of prices. He discusses briefly the technique of estimating price movements, describes the period of rising prices from 1850 to 1873, the period of falling prices from 1873 to 1896, and then gives in more detail a review for the period since 1896. The increase in prices since 1900 is a well-defined movement, not due to temporary causes, is not confined to any one group of commodities, and is not limited to any one country. Furthermore, it has occurred at a time when technical progress in industrial processes might lead one to expect a contrary movement. The causes of this upward tendency since 1900 include (1) the appearance on the world market of new consumers (South America, Asia, Africa, etc.), who have enlarged the general demand; (2) the growth of cities and similar changes have caused new wants to develop and have extended the demand; and (3) the increase in the world's capital and the consequent greater income have also enlarged the demand on the world's producing powers. To satisfy this larger demand more producers have been set to work in a brief space of time, and higher prices have resulted because of the necessity of using less efficient producers, deeper mines, poorer soil, etc. These factors, however, are of importance in price movements only if the value of the circulating medium remains constant. The author finds that the effects of the greatly increased production of gold have been: (1) there is now a larger quantity of gold in the possession of the leading countries, and this has developed credit and stimulated consumption; (2) the number of gold standard countries has increased because of the larger supply of gold, and this has enlarged the purchasing power of the newer countries; and (3) the purchasing power of the countries which produce the gold has been directly increased.

The author handles the quantity theory of money rather gingerly, though he insists that in some form it must be accepted; the only modifications mentioned, however, are the traditional references to the use of credit instruments and the more rapid circulation of currency. Being originally prepared for a lecture, the study contains but few statistical statements. A series of notes at the end of the volume give an adequate number of references to sources.

The study of Mario Alberti is the second of what is promised

to be a periodical review of prices and wages in the Austrian city of Trieste. The first study, *Il Costa della Vita, i Salari e le Paghe a Trieste nel l'Ultimo Quarto di Secolo*, covered the period 1885 to 1910, and in the present volume the information is brought down to 1911, while some comparisons with foreign countries are also given; an appendix contains an extensive bibliography on prices and the cost of living.

The principal contribution of the study is the collection of retail prices and of wages, with the computations showing the development of these two factors over a period of years. The price data are retail prices paid by the Trieste poorhouse (*Istituto dei Poveri*); a weighted and an unweighted index are given for these prices, the latter showing that prices were 12.35 per cent higher in 1911 than in 1910, and the former (weighted according to the consumption of workmen's families) showing that the cost of living had increased 13.12 per cent in the same time. The wage data were secured principally from trade agreements, and the index computed from them showed that wages at the beginning of 1912 were 8.67 per cent higher than in 1910.

A special chapter is devoted to comparing the cost of living and wages in Trieste with foreign countries, the series of cost-of-living reports of the British Board of Trade being used as the basis for most of the comparisons. These contrasts show that the cost of living in Trieste is higher than in the United States or in any leading European country; wages in Trieste are much lower than in the United States, lower than in England and Germany, about the same as in France, and higher than in Italy and Belgium. The weakness of this statement lies in the fact that the single city of Trieste is compared with an average for a whole country; thus the cost of living average for the United States is made up of data for 28 cities, including places like Muncie, Indiana, and Detroit, Michigan. From estimates given elsewhere in the volume, it may safely be inferred that an average for the leading Austrian cities would show a cost of living index much lower than that for Trieste. A comparison of Trieste with Baltimore or Liverpool would have been more to the point. The author is also somewhat careless with his percentages; he finds that the wage index for Trieste is 76, for England 100 and for the United States 230; he then concludes (page 59), "wages in the United States are on an average 130 per cent higher than in England, and 154 per cent higher than in Trieste." It seems hardly nec-

essary to point out that 230 is not 154 per cent higher than 76. The same error occurs elsewhere in the chapter.

A bibliography fills up 46 out of the 114 pages in the volume; in the present deluge of printed matter on prices and cost of living, an indiscriminate list, such as the one here given, is of less value than a selection of sources with notes as to the value of the contents. The author has rendered a service in giving a clear and full statement of the course of prices and wages in an important industrial and commercial city of central Europe.

The volume by Fritz Rothe is mainly devoted to an account of the sources and method of distribution of the meat supply of the city of Cologne. While the author offers little in the way of positive suggestions for improving and increasing the meat supply of Germany, he has brought out clearly the wasteful methods now in use, and the need for a constructive policy in order to relieve the present distress.

HENRY J. HARRIS.

Library of Congress, Washington.

NEW BOOKS

ARNAUNE, A. *La monnaie, le crédit et le change.* Fifth edition brought down to date. (Paris: Alcan. 1912. Pp. xii, 564. 8 fr.)

ASHLEY, W. J. *Gold and prices.* (New York: Longmans. 1912. Pp. 32. 50c.)

Six articles originally published in "Pall Mall Gazette." Gold largely responsible for increase of prices. Believes that present upward movement of prices will soon cease.

BENDIX, L. *The Aldrich plan in the light of modern banking.* (New York: Robert R. Johnston. 1912. Pp. xiv, 227. \$2.)

To be reviewed.

BRADY, J. E., editor. *Banking law journal digest; a complete digest of all the legal decisions, which have appeared in the issues of the "Banking Law Journal," from January, 1900, to June, 1912, inclusive.* (New York: Banking Law Journ. Co. 1912. Pp. xix, 210. \$8.)

BRAEDT, F. *Das Sparkassenwesen im Königreich Sachsen.* (Tübingen: H. Laupp. 1912. 4 m.)

BROWN, W. H. *The story of a bank. An account of the fortunes and misfortunes of the second bank of the United States, with a preliminary sketch of the first bank.* (Boston: Badger. 1912. Pp. xxiii, 213. \$1.50.)

CLEVELAND, F. A. *The budget as a means of locating responsibility*

for waste and inefficiency. What the president is trying to do by way of budget making for the national government. (New York: Academy of Political Science. 1912. Pp. 16.)

CROSS, F. J. *How I lived on 3d. a day and what I learnt from it: with chapters on the A B C of cheap and good foods, their cost and comparative value.* (London: Richard J. James. 1912. Pp. 124. 6d.)

HELMO, J. *Die Bankenquête 1908.* (Leipzig: Dieterichische Verlagsbuchh. 1912. Pp. 200.)

HELMREICH, T. *Das Geldwesen in den deutschen Schutzgebieten.* Vol. I. *Neu-Guinea.* (Nürnberg: J. L. Schrag. 1912. Pp. 62, illus. 1 m.)

HOBSON, O. R. *Agricultural credit banks.* (Washington: Government Printing Office. Pp. 21.)

HUSKINSON, T. W. *The banks of England's charters; the causes of our social distress.* (London: King. Pp. 152. 2s. 6d.)

LENZ, F. and UNHOLTZ, O. *Die Geschichte des Bankhauses Gebrüder Schickler. Festschrift zum 200-jährigen Bestehen.* (Berlin: Gebrüder Schickler. 1912. Pp. xxiv, 355, 94.)

LEWIN, J. *Der heutige Zustand der Aktienhandelsbanken in Russland (1900-1910).* Freiburger Inauguraldissertation. (Freiburg i.B.: H. M. Popper & Sohn. 1912. Pp. xii, 164.)

LEWIS, S. E. *The river of money and the influence of the money trust system upon the increased cost of living.* (New York: Knickerbocker Press. 1912. Pp. iv, 72. 75c.)

MINOPRIO, J. *Geldklemme und Kreditnot.* (Berlin: Verlag für Fachliteratur. 1912. 1.50 m.)

MUHLEMAN, M. L. *The world's principal monetary systems.* American Bankers' Association Year Book, 1912. (New York: Banking Law Journ. Co. 1912. Pp. 52, 59, illus. \$1.)

MYRICK, H. *Coöperative finance. An American method for American people.* (New York: Orange Judd Co. 1912. Pp. 300, illus. \$2.50.)

Proposes a federation of banks, somewhat similar in effect to the Aldrich plan, but with more popular control. Emphasis placed upon the need of land mortgage banks.

NUSCHELER, H. E. *Die Zürcher Kantonalbank, 1870-1904.* (Zürich: E. Speidel. 1906. 1912. Pp. xii, 175 and 204. 2.40 m.)

PFAHL. *Die mitteldeutsche Privatbank, Aktiengesellschaft, früher: Magdeburger Privat-Bank 1856-1911.* (Halle: H. Kuhnt. 1912. 4 m.)

RAINER, L. S. *Goldproduktion und Teuerung.* (Berlin: Verlag für Fachliteratur. 1912. Pp. 31. 1.50 m.)

RATZKA-ERNST, C. *Welthandelsartikel und ihre Preise. Eine Studie zur Preisbewegung und Preisbildung.* (Munich: Duncker & Humblot. 1912. 7 m.)

SCHAUER, C. *Die Preussische Bank.* (Halle a.S.: F. Münter. 1912. 4.50 m.)

TAIT, J. S. *The relation of banking reform to corporate financing; read before the American Civic Alliance, at Washington, December 29, 1911.* (Washington: B. C. Adams. 1912. Pp. 24.)

THIEME, F. *Die Entwicklung der Preise und ihre Bedeutung für die wirtschaftliche Lage der Bevölkerung der Stadt Halle.* (Munich: Duncker & Humblot. 1912. 3 m.)

TIFFANY, F. B. *Handbook of the law of banks and banking.* (St. Paul, Minn.: West Pub. Co. 1912. Pp. xi, 669. \$3.75.)

WEBB, M. de P. *Britain's dilemma.* (London: King. 1912. 7s. 6d.)

If the Indian mints were opened and the financial policy of the Indian Council reconstructed resulting in a use of gold in that country, the overabundance of gold in Europe would be diverted, and accordingly prices would be steadied and labor unrest lessened.

WHITE, H. *Plans for monetary reform. Address delivered at the Finance Forum of the West Side Y. M. C. A., Nov. 13, 1912.* (New York: Y. M. C. A. 1912. Pp. 24.)

WILLIAMSON, A. *The French law relating to bills of exchange, promissory notes, and cheques.* (London: Stevens & Sons. 1912. Pp. 224. 10s.)

— *Trust companies in the United States.* 1912 edition. (New York: U. S. Mortgage & Trust Co. 1912. Pp. xlvii, 442.)

— *Die Reichsbank, 1876-1910.* (Jena: Fischer. 1912. Pp. viii, 251. 8 m.)

Public Finance, Taxation, and Tariff

Annexation, Preferential Trade and Reciprocity. By CEPHAS D. ALLIN and GEORGE M. JONES. (Toronto: Musson Book Company. 1911. Pp. xii, 390. \$2.50.)

This careful study of the Canadian annexation movement of 1849-1850 shows in interesting fashion the importance of economic influences in determining political development, and at the same time suggests the inadequacy of a purely economic explanation of history. By the sweeping away of the British corn laws, Canada lost the preference her products had enjoyed in the English market, while the maintenance of the navigation acts put her at a disadvantage in competing with the United States in that market. From other markets her goods were excluded by high

protective duties. The sudden loss of the British outlet caused a period of sharp depression in parts of Canada and notably in Montreal. Out of this economic distress, together with a certain irritation arising from political causes, arose the movement for annexation to the United States which developed such sudden strength in the latter part of 1849 and which was snuffed out a few months later with equal suddenness.

Allin and Jones's account of the movement, which is based on a careful study of the newspapers and official documents of the period, traces impartially the rise and decline of the agitation, and shows clearly the forces that gave it strength. As the authors say:

The revival of business dealt a crushing blow to the cause of annexation. . . . The annexation movement was in reality but a passing phase of the economic history of the colony; it was essentially the product of adversity and resentment against the English government, and it could not thrive during a period of returning prosperity.

The authors have let the actors and newspaper writers of the time tell their own story for the most part; and the result is perhaps not wholly happy from the literary point of view, but this loss is counterbalanced by the definiteness of the picture of conditions and opinions that is afforded. The book is a useful one.

HENRY R. MUSSEY.

Columbia University.

Provincial and Local Taxation in Canada. By SOLOMON VINEBERG. Columbia University Studies in History, Economics and Public Law, Vol. LII, No. 1. (New York: Longmans, Green and Company, 1912. Pp. 171. \$1.50.)

Dr. Vineberg has broken new ground. This monograph is the first attempt to present a comprehensive survey of the systems of local and provincial taxation in force in the Dominion. The scope of the task, the variety of details in the different provinces, and the lack of secondary material have made it necessary to deal with the subject only in outline. But as an introduction to the field it is an excellent piece of work, concise, well-arranged, lucid, and balanced in judgment.

The opening chapters are historical, reviewing the growth of the constitution and the consequent distribution of taxing power, the development of municipal institutions, and pre-confederation systems of taxation. Though brief, they furnish a good back-

ground; there are a few minor errors in the constitutional references, as in the statement (p. 18) that the federal veto power is exercised only when a provincial legislature has clearly exceeded its jurisdiction—the veto as a matter of fact, having been used to enforce conformity to federal policy in fields quite within the constitutional competence of the provinces.

The most distinctive features of Canadian taxation, as outlined in the later chapters, may be noted. First is the close connection between federal and provincial finance, through the payment by the Dominion to the provinces of subsidies averaging forty per cent of their total revenue. Dr. Vineberg touches upon the dangers involved in this separation of the spending from the providing power, but is rather too optimistic in his conclusion that the constant demands for better terms have been finally settled by the revision of 1907, in view of the renewed demand urged this present session by British Columbia.

Quite in the contrary direction is the variation from United States practice afforded by the separation of the sources of revenue of provincial and municipal authorities. The historical basis for the abstention of the provinces from levying a general property tax is shown to be that in earlier years imperial subsidy or customs revenue, and in later years federal subsidy and crown lands resources, afforded readier means of meeting financial needs.

Not only has the general property tax not been required by the provinces, but the corporation taxes which the states to the south have devised to replace or supplement it have not been developed in any marked degree, except as to moderate taxes on financial and transportation companies. Succession duties, however, have been adopted in all the provinces, and the question of jurisdiction involved has been faced more successfully than in the case of taxes on companies operating in several provinces. The author omits to note the interesting experiments made by Ontario in taxing mines on net profits.

In the local field, chapters are given to the taxation of real estate and of incomes, and to the business assessment. Under the first head chief interest attaches to the clear summary of the steps taken in the western provinces to exempt improvements, in whole or in part. It is rightly pointed out that the rapid progress of this movement has been possible only because of the tremendous increase in land values, and the comparatively low rates levied, and that the taxes have not prevented speculation. In fact, it

might be added that the western speculator has every reason to bless this much heralded tax reform as a very useful red herring drawn across the trail which might otherwise have led to taxes on the enormous increment reaped in these early years. The municipal income taxes are given a qualified approval, hardly justified by experience of the heavier burden borne by salaries as compared with independent incomes. The business assessment is declared a decided advance on the personal property tax which preceded it, but still far from perfect; the author, after making the general criticism that the Ontario system of local taxation lacks consistency in adopting both property and income as bases of assessment, proceeds himself to draw up an amended scheme in which the double basis is retained. The distinctive feature of the proposal, so far as the reform of the business assessment goes, is the taxation of business income, ascertained in the first place by investigation on English or Prussian lines, and thereafter by taking such a multiple of the rental of the premises occupied as this investigation shows to be warranted, on the average, in each occupation. Assuming the possibility of ascertaining income correctly in the first place, it is not quite clear why this basis should not be maintained, instead of going to the indirect and averaged ratio suggested. While, however, there may be room for difference of opinion on this and other points of constructive criticism, there is no question of the service Dr. Vineberg has afforded students of taxation by the comprehensive description and balanced comment which mark his work.

O. D. SKELTON.

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The History of Local Rates in England. In Relation to the Proper Distribution of the Burden of Taxation. By EDWIN CANNAN. Studies in Economics and Political Science, No. 1 in the Series of Monographs by Writers Connected with the London School of Economics and Political Science. Second edition. (London: P. S. King and Son. 1912. Pp. xiv, 209. 3s. 6d.)

The first edition of this book which appeared in 1896 has won for itself a permanent place in the history of taxation. In the edition now before us the first five chapters, constituting nearly two thirds of the text, are republished from the first edition, with a few corrections and the omission of the last five pages. The

three new chapters are concerned largely with present-day problems of local finance in England.

In chapter 6 is treated the much mooted question of the local ratepayer against the national taxpayer. "The triumph in 1840 of the principle that local rating was to be confined to immovable property did not leave those who thought that kind of property too heavily burdened altogether without resource. While local taxation fell entirely upon immovable property, general or national taxation fell also, and perhaps for the most part, upon other property and on incomes derived from labour. Consequently, the more any particular expense could be placed upon the general taxes rather than on local rates, the less would be the burden upon immovable property. Hence the struggle between 'the ratepayer' and 'the taxpayer'" (p. 132), which has played such an important role in English financial history for two generations, and which has resulted in the growth of numerous grants from the general government to the local governments in "relief of rates"—grants in aid of the local police service, elementary education, charities, corrections, and the like, and which has resulted also in the transference to the local governments of the proceeds of certain taxes and fees collected by the central government. The story of this struggle and its results as told by Mr. Cannan is the most valuable contribution of this new edition of the book. It is likewise the part which is most suggestive to the American student, for he will naturally ask: Is England's experience a signpost pointing in the direction whither we are going in the United States? If our antiquated personal property tax is finally discarded, and the "American rate" comes to be merely a tax upon real estate, will this result be followed in many sections of the country, as it has been in England, by a clamor for increasing grants of funds from the state to local governments, and by a continuous increase in the interference of the state governments with local affairs?

The other new chapters treat a variety of subjects, many of them more or less controversial, particular attention being given to the subject of the equity of rates concerning which the author's conclusions are essentially negative in character.

The book contains a mass of facts, and shows a painstaking search of the records. To the American reader unfamiliar with the intricacies of English local government the book is difficult reading, although it is well worth the effort, particularly in view of the

suggestiveness of England's experience in connection with our own problem of the general property tax.

E. W. KEMMERER.

Princeton University.

The Exchequer in the Twelfth Century. By REGINALD L. POOLE. The Ford Lectures Delivered in the University of Oxford in Michaelmas Term, 1911. (Oxford: The Clarendon Press, 1912. Pp. ix, 195. 6s. 6d.)

This book describes the beginnings of part of one of the modern complex systems of administration, the central financial machinery, the exchequer of England in the twelfth century. It is, therefore, not a financial history, nor a history of taxation, but would form a chapter in such a work. The author reviews the literature on the subject and then sketches the system of payments and accounting to the king before the time of Henry II, the most noteworthy feature of which was a method of auditing the accounts worked out by counters on a chequered table and recorded on rolls. This took place before 1118 and from the chequered table (*scaccarium*) we get the term exchequer. Then follows a description of the exchequer mainly under Henry II, its officials, their duties and emoluments, the way in which payments were made and the method of drawing up the rolls; a final chapter treats of the exchequer as a court. The most valuable single source used is the *Dialogus de Scaccario*, a work written a little before 1180 by Richard Fitz-Neal, the king's treasurer. Through it, more is known of the central financial department of Henry II than of that of any other mediaeval king. Modern writers find that the treasurer was, in general, accurate when he dealt with details of administration, but was quite liable to go wrong when he tried to explain the origin of some office or practice. To the careful study of the *Dialogus* and of other sources, like the Pipe Rolls, Professor Poole has added discriminating use of the results of the investigations of other scholars in the field of early financial history and has thus produced an excellent essay on the whole subject of the exchequer and its origin. The matter is technical, but he has made his book readable. One can wish that he will find an opportunity to give us the results of his work on the sources of the king's income. There is a useful index.

SYDNEY KNOX MITCHELL.

Yale University.

Les Gardes d'Honneur de la Marne, 1813. By FRANCOIS SAGOT.
(Reims: Matot-Braine. 1911. Pp. 167. 2.50 fr.)

The *Gardes d'honneur* were a cavalry corps of four regiments which Napoleon raised in 1813 for his last campaigns, to reinforce his Old Guard, decimated by the Russian expedition. The imperial treasury was empty, the resources of the nation no longer responded to taxation, and the most vigorous among the poorer classes had all, long before, been sent to the front. The recruiting, equipping, and financing of these troops therefore presented a delicate and perplexing problem. M. Sagot, on the basis of searching investigations in the *Archives Nationales* and in the *Archives Départementales de la Marne*, shows how this problem was solved by an appeal to personal vanity, supplemented by a threat to private wealth. The members of the *Gardes d'honneur* were to be chosen exclusively from the ranks of the higher classes, who had before escaped enlistment by hiring substitutes, and they were to pay for the privilege of this exclusiveness by defraying their own expenses during their first year of service. It was to be a high honor to be called upon to join these troops and to contribute to their maintenance, but an honor not to be lightly declined, nor, in fact, easily evaded. The terms of the imperial summons made it very clear that no cautious subject could afford not to appear flattered on being selected. M. Sagot, quoting liberally from manuscript documents, shows how the expression of the Imperial Will in this matter, faithfully interpreted by minister, prefect, and sub-prefects was transmitted to the Department of the Marne and complied with therein.

The specifically military and administrative nature of this monograph does not allow a detailed review at this place. But although in no sense a treatise on financial history, M. Sagot's *Gardes d'Honneur de la Marne* belongs to that happily large and varied class of books, which the economist may take up without remorse in his weary moments, with the comforting sensation that he is widening his field of professional knowledge, while indulging in a very pleasant form of intellectual recreation.

WILLIAM E. RAPPARD.

Harvard University.

NEW BOOKS

AGUILLO, L. *Exposé de la taxation des mines dans les divers pays.*
(Paris: Dunod et Pinat. 1912. Pp. 76. 2.50 fr.)

ANGELL, N. *International finance and international polity*. (London: Heinemann, 1912.)

BAGGE, Mrs., editor. *The unionist workers' handbook*. (London: King, 1912.)

Includes chapters on single tax policy, tariff reform, and social reform.

BEARD, C. A. *American city government*. (New York: Century Co., 1912. Pp. 420.)

Contains chapters on municipal finance, franchises and public utilities, municipal ownership, and tenement-house reform. Not designed for experts but for students and citizens who wish a general survey.

BEATTY, C. *A practical guide to the death duties*. (London: Effingham Wilson, 1912. 4s.)

BRINDLEY, J. E. *Taxation in Iowa*. Iowa applied history series. (Iowa City: State Historical Society, 1912. Pp. 120.)

CURTISS, G. B. *The industrial development of nations, and a history of the tariff policies of the United States, and of Great Britain, Germany, France, Russia, and other European countries*. (Binghamton, N. Y.: G. B. Curtiss, 1912. Three volumes. \$15.)

DEWEY, D. R. *Financial history of the United States*. Fourth edition. (New York: Longmans, 1912. Pp. xl, 544. \$2.)

Contains a new chapter bringing the history down to date.

von DEWITZ. *Erbzuwachssteuer als Besitzsteuer. Eine Krönung der Reichsfinanzreform*. (Berlin: Verlagsanstalt Politik, 1912. 0.80 m.)

DUNNING, N. A. *The tariff; all about it from its rudiments up*. (Los Angeles: Grafton Pub. Co., 1912. Pp. 198. 25c.)

FALLOON, G. *Single tax explained; its origin, object and effect*. (Kansas City, Mo.: Landowners Protective Assoc., 1912. Pp. 33. 15c.)

FLORA, F. *Manuale della scienza delle finanze*. Fourth edition, revised and enlarged. (Livorno: R. Giusti, 1912. Pp. 759. 7 l.)

FILLEBROWN, C. B. *A single tax handbook for 1913*. (Boston: C. B. Fillebrown, 1912. Pp. 180. 25c.)

Contains extracts from Mill, George, and Shearman, Mr. Fillebrown's *A. B. C. of Taxation*, and *Single Tax Catechism*. A useful compendium.

GOLDFROST, T. *Treatise on the federal corporation tax law*. (Albany: Matthew Bender & Co., 1911. Pp. 321.)

GOLDSTEIN, G. *Der deutsche Eisenzoll ein Erziehungszoll*. (Berlin: L. Simion, 1912. 1 m.)

HERRMAN, K. *Das Besitzsteuerproblem in Deutschland und in Frank-*

reich in seiner heutigen Lösung. (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. viii, 140. 3.20 m.)

JANNIOT, A. *Les trois taxes, timbre, transmission, impôt sur le revenu, appliquées aux sociétés françaises.* (Paris: Alcan. 1912. Pp. vi, 202. 4.50 fr.)

JARVIS, T. C. *Income tax.* (London: Effingham Wilson. 1912. Pp. xxxii, 225. 6s.)

JASTROW, I., editor. *Handelspolitik.* Textbücher zu Studien über Wirtschaft und Staat, I. (Berlin: Georg Reimer. 1912. Pp. x, 182. 3 m.)

This compact little volume contains judiciously selected and well-arranged excerpts from various sources; books, tariff acts, commercial conventions, statistical abstracts, political speeches, memorials, etc. It is provided with explanatory remarks by Dr. Jastrow, and seems to be well adapted for its main object, to give the student easy access to some illustrative material, both documentary and other, on the question of the tariff. Although the subject is presented in a coördinate way, the value of the book as a means for self-education is doubtful.

S. L.

JEFFERSON, H. N. and ESCHER, F. *Banking practice and foreign exchange.* Modern business series. (New York: Alexander Hamilton Institute. 1912. Pp. 14, 407. \$3.50.)

KOEHNE, C. *Das Recht der Kurtaxe. Ein Beitrag zum Finanz- und kommunalen Verwaltungsrecht vornehmlich Preussens.* Abhandlungen aus dem Staats- und Verwaltungsrecht mit Einschluss des Kolonial- und Völkerrechts, 29. (Breslau: M. & H. Marcus. 1912. Pp. x, 134. 4.10 m.)

MAYER, G. *Le monopole des allumettes des 1890 à 1909.* (Nancy: Berger-Levrault. 1912. Pp. 13.)

PFITZNER, J. *Die relative Steuerkraft der preussischen Städte in graphischer Darstellung.* (Oldenburg. G. Stalling. 1912. 2 m.)

SCHNEIDER, O. *Bismarcks Finanz- und Wirtschaftspolitik.* Staats- und sozialwissenschaftliche Forschungen, 166. (Munich: Duncker & Humblot. 1912. Pp. xv, 276. 7 m.)

SEATON, R. C. *Power versus plenty. Some thoughts on the tariff question.* (London: King. 1912. Pp. 44. 2s. 6d.)

SONNENBERG, G. *Deutschland's sozialpolitische Einrichtungen im Budget des Reiches dreier Einzelstaaten Preussen, Bayern, Baden und dreier grosser Städte Berlin, Breslau, Köln. Untersucht für die Jahre 1879, 1887, 1895, 1903 und 1908.* (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. 207. 4.40 m.)

STRUTZ. *Der Wertzuwachs im Reichszuwachssteuergesetz.* Finanz-Archiv, Vol. II. (Stuttgart: J. A. Cotta. 1911. Pp. 50.)

SWANK, J. M. *The industrial policies of Great Britain and the United States; part of the annual report of the secretary of the American Iron and Steel Association for the year 1876*, reprinted. (Philadelphia: Am. Iron and Steel Assoc. 1912. Pp. 114. \$2.)

VIRENQUE, L. *Des subventions proportionnelles au centime dans le droit administratif français*. (Toulouse: Bonnet. 1912. Pp. 175.)

WAGNER, A. *Traité de la science des finances*, Vol. III. *Le credit public*. Translated from German into French by PAUL HALLIER. (Paris: Giard et Brière. 1912. Pp. 163. 8 fr.)

A financial study written for Schönberg's encyclopaedia; not an extract from *Finanzwissenschaft* and does not include the author's discussion on the theory of public debt.

WIESINGER, K. *Die Zölle und Steuern des deutschen Reiches*. Sixth edition. (Munich: Schweitzer. 1912. Pp. vii, 441. 10 m.)

WILLGREN, K. *Oefversikt af den Modärna Statliga Inkomst- och Förmögenhetsbeskattningen i Europa*. (Helsingfors. 1911. Pp. vii, 724.)

WISSINGBURGH, O. *Eine bayerische Staats-Lotterie*. (Munich: Steinebach. 1912. Pp. 19. 0.75 m.)

_____ *Departmental committee on local taxation. First report* (6304. 1d.) *Appendix*. Vol. I. *Evidence, November 15, 1911-May 1, 1912* (6303. 4s.). Vol. II. *Memoranda submitted to the committee* (6303. 1s. 4d.). (London: King. 1912.)

_____ *Home rule from the Treasury bench. Speeches during the first and second reading debates*. (London: Unwin. 1912. Pp. 320. 7s. 6d.)

_____ *Public accounts committee. First, second, and third reports, with evidence and appendices. Estimates, report of select committee* (277. 1s.). *Revenue and expenditure for 1911-1912, showing England, Ireland, and Scotland separately* (190. 2d.). *Imperial revenue and expenditure, Great Britain and Ireland, from 1819 to 1912* (189. 3d.). (London: King. 1912.)

_____ *Some corporation and taxation problems of the state, and a statement of the reasons for an applied economics club*. Humanistic series, 13. (Austin, Tex.: University of Texas. 1912. Pp. 146.)

_____ *Who pays: the real incidence of taxation*. Social science series. (London: Allen. 1912.)

_____ *Die neuen Gesetze über die allgemeine Erwerbsteuer und über die Einkommensteuer*. (Budapest: M. Rath. 1912. Pp. 136. 3 m.)

Population and Migration

Problems in Eugenics. Papers Communicated to the First International Eugenics Congress Held at the University of London, July 24th to 30th, 1912. (London: The Eugenics Education Society. 1912. Pp. xix, 496. 8s. 6d.)

Heredity and Eugenics. By W. E. CASTLE, J. M. COULTER, C. B. DAVENPORT, E. M. EAST, and W. L. TOWER. (Chicago: The University of Chicago Press. 1912. Pp. vii, 315.)

Heredity in Relation to Eugenics. By CHARLES B. DAVENPORT. (New York: Henry Holt and Company. 1911. Pp. xi, 298. With 175 illustrations and diagrams, and complete bibliography and index. \$2.00.)

The Social Direction of Human Evolution. By WILLIAM E. KELLOGG. (New York: D. Appleton and Company. 1911. Pp. xii, 249. \$1.50.)

The Kallikak Family. By H. H. GODDARD. (New York: The Macmillan Company. 1912. Pp. xv, 121, charts and illustrations. \$1.50.)

Race Improvement or Eugenics. By LA REINE HELEN BAKER. (New York: Dodd, Mead and Company. 1912. Pp. 137. \$1.00.)

The Task of Social Hygiene. By HAVELOCK ELLIS. (Boston: Houghton, Mifflin Company. 1912. Pp. xv, 414. \$2.50.)

The literature of eugenics is rapidly developing, more rapidly than the "science" itself, in fact. The seven books before us vary greatly in point of view, in scope, and in value, but speaking in general they amply bear witness to the fact that eugenics is in the early, dangerous, stage of enthusiastic imaginings and daring inference, where it needs protection from its friends and where searching criticism from without may do it good and render society some protection.

Judging from the papers presented before the International Eugenics Congress, there is very little agreement, in Europe and America, as to subject-matter and method of theoretical eugenics, and still less as to measures of practical application. While, for instance, sterilization of hopeless defectives has found favor in this country and already been provided for in the statutes of approximately a dozen states, the English will have none of it. And again while the Continental investigators seem on the whole to have confined themselves to the anthropological and demographic

methods, the English, and more especially the Americans, under the leadership of the biologists, have gone ahead rigorously with experimental genetics, and are daringly applying the principles of Mendelian heredity to the interpretation of human evolution. The papers presented at the congress are grouped in four sections, dealing with the relation of biology, sociology, and medicine to eugenics, and with "practical eugenics." Covering so wide a field, it cannot be said that the papers get anywhere, except to indicate in a suggestive way the wide range of interests and forces the eugenist will have to consider. A few of the papers are really contributive. Especially may be mentioned Raymond Pearl's paper on the inheritance of fecundity, and that of Dr. Weeks' on the inheritance of epilepsy. Bleeker Van Wagenen's report for the Eugenics Section of the American Breeders' Association gives an interesting summary of American legislation and experience in the sterilization of defectives. The English generously kept themselves in the background, their only really serious paper being one by Dr. Mott, pathologist to the London county asylums, on "Heredity and Eugenics in Relation to Insanity," in which the author, unlike many of our American brethren, carefully tries to give due weight to the influence of both heredity and environment in the causation of mental defect. Other papers of interest to the economist are Lucien March's discussion of the fertility of marriages according to professional and social position, and Achille Loria's on the psycho-physical élite and the economic élite. On the whole, the first Eugenics Congress was a good deal of a blunderbus, scattering its fire widely and with uncertain aim. It may, however, be taken as a hopeful indication of more productive coöperation in the future between biologists, sociologists, and medical men. Future eugenics congresses will be in the nature of clearing-houses of knowledge and coördinating centers. It is but the question of a few years before the economists will have to make their contribution, and already, in the general ideal of conserving human energy, which should be perhaps *the* economics ideal, the eugenics idea is so important, in promise, that economists cannot afford to ignore it.

The next three titles are from biologists. The book by Castle, Coulter, *et al.* consists of a course of lectures summarizing recent investigations, mostly of an experimental genetic character, into variation, heredity, and evolution in relation to the improvement

of plant, animal, and human strains. The lay reader will find lucid explanations of Mendelian inheritance—without some knowledge of which no one can understand the work now being done in eugenics; but the only chapters dealing directly with eugenics are two by C. B. Davenport, which are reprinted from his *Heredity in Relation to Eugenics*.

Davenport's book may be taken as fairly definitive of the status of eugenics in this country, since the author writes from the authority of official position—the directorship of the Department of Experimental Evolution of the Carnegie Institution and of the Eugenics Record Office, Cold Spring Harbor, Long Island. The meat of the book is chapter 3, on the inheritance of family traits. The greater portion of this consists of a running and more or less superficial survey of the inheritance of a large number of physical defects, many of them of a rare and unimportant nature. In many cases the inheritance of the defect is demonstrated, but in others the evidence offered is extremely meager; the pedigrees sometimes go back but one or two generations and the fraternities are frequently incomplete, leaving the reader with the near-conviction that the data may be misrepresentative, and the "sampling" unscientific. Moreover, when an author pictures a few family trees and thinks that he thereby proves the organic inheritance of such complex characteristics as musical, artistic, and literary ability, mechanical skill, and pauperism, he affords as sad a spectacle of the specialist running amuck out of his course as did ever sociologists in the old palmy days when they were borrowing bodily from biology and uncritically clapping onto social theory theoretical crudities which the scientists themselves had got beyond. Dr. Davenport makes a half-hearted attempt to appraise the influence of environment, but his treatment is flimsy and one might almost say insincere. He is not interested in environmental influence. He sees little but organic inheritance in the causation of human characteristics, in which he is undoubtedly wrong; and he sees no heredity that is not Mendelian, in which, no doubt, he stands good chance of being right. His discussion of the influence of the individual on the race, including the Jukes, the Ismaelites, and the Bunker family, is practically worthless because he ignores or overlooks environmental influences, economic and social. His treatment of the significance of migrations is marred in the same way. New York city is the result of the germ plasm of "a band of Dutch traders." Virginia

was enriched by "a germ plasm which easily developed such traits as good manners, high culture, and the ability to lead in social affairs." New England's abandoned farms "point to a trait in our blood that entices us to move on to reap a possible advantage elsewhere"—similar, one may ask, to the trait "in the blood" of the undersized defectives of South Europe which drives *them* to reap possible advantages on our shores? Surely the economist should follow up this germ plasm clue! It should marvelously simplify the investigation of economic history and economic organization.

Seriously, we regret that Dr. Davenport did not wait a year or two before putting out this book. When a writer cites a family of yacht builders in which father, son, and grandson have designed and built cup-defenders, as a proof of the inheritance of specific mechanical ability, he has simply failed to think of the power of family interests and traditions, training, and above all of suggestion. No biologist should set his pen to eugenic paper until he has prayerfully brushed up his knowledge of modern genetic psychology and psychological sociology. He will then talk less glibly of the inheritance of specific mental abilities. By all means let us have all the light on heredity that scientific investigation, amply endowed, can give us, but in our enthusiasm in following out a new line of discovery let us not neglect to view scientifically *all* the factors that determine the character of the individual in society. A practically contemptuous attitude toward environmental influence, an ignoring of the tremendous power of "social heredity" and especially of the power of seemingly trivial suggestion on the young developing mind, cannot but injure, in the long run, the cause of racial improvement which Dr. Davenport has with such devotion and ability set himself to stimulate. These adverse criticisms do not denote any lack of appreciation of the fact that the author is doing hard pioneer work, and that in founding the Eugenics Record Office and in training eugenics investigators he is perhaps building for a social reform more lasting than are some to which both sociologists and economists are devoting their best energies.

Professor Kellicott's book is built on broader lines, in that he recognizes the at least temporary value of the work of the biometrists under the leadership of Karl Pearson. For a general, brief survey of the present relation of biology to sociology and eugenics

perhaps nothing better can be found. The author grants cordial recognition to the necessity of gathering data with regard to environmental as well as hereditary influence, but he, too, in spite of his broader horizon, falls more than once into the uncritical receptive attitude. For instance, he accepts without question Pearson's crude and palpably unscientific investigation into the inheritance of mental and moral characters, Galton's study of Royal Society fellows, and Schuster's study of Oxford class lists. Again, he betrays the biologist's human fallibility in his brief references to the increase of crime—which completely ignore the increasing complexity of society as a cause. So too in his discussion of the differential birth-rate (pp. 123 ff.), which may profitably be compared with Loria's paper above mentioned, he simply assumes uncritically that economic position and psychic ability are coterminous. And nowhere does he sufficiently point out the extreme difficulty of distinguishing between the effects of environment and heredity.

The Kallikak Family, by the director of the research laboratory of the Vineland (N. J.) Training School for Feeble-minded Girls and Boys, is a book of another type. What investigations such as those into the Jukes and Edwards families failed to do—segregate environmental and hereditary influences and demonstrate the heritability of mental defects—this monograph does, beyond possibility of reasonable doubt. Not only is the hereditary character of feeble-mindedness proved with practical conclusiveness, but its economic significance is set forth calmly and sanely and with rare impressiveness. Every economist should read this book, whether he is interested in a dream of a future race, perfect in beauty and holiness, or not.

The little book by La Reine Helen Baker is an essay on the ethics of eugenics. The author has some keen and sensible, some daring ideas, and is not without a fetching knack of expression which adds to the suggestive quality of the book.

It is impossible to do justice to Havelock Ellis' *The Task of Social Hygiene* in short space, inasmuch as the title is misleading and the book covers a variety of subjects from the emancipation of women in relation to romantic love to the problem of an international language. A better title for the book would have been

"the conservation and economy of human energy," for this unifying idea runs through all the essays—the liberation of human capacity under a system of rational morals looking toward the upbuilding of a new race and a new society. There is, perhaps, somewhat in the book that the reader with static and non-utilitarian notions of morality will recoil from, but no one can fail to be stimulated by a perusal of most of the chapters. The economist will find, in chapter 5, a welcome change from constant calamity-howling over the falling birth-rate, though he may think the author extreme in saying that large families "may probably be regarded, as Nacke suggests, as constituting a symptom of degeneration." Other chapters worthy of attention are those on the problem of sex hygiene (in which a specialist on the psychology of sex urges caution), on immorality and the law (in which he looks for little result from vice commissions and vice crusades that expect to solve the prostitution evil by legislation), on the war against war, and the final chapter on individualism and socialism. "The key to the situation," says the author, "is to be found in the counterbalancing tendency of individualism, and the eugenic guardianship of the race. . . . Through the slow growth of knowledge concerning hereditary conditions, by voluntary restraint, by the final disappearance of the lingering prejudice against the control of procreation, by sterilization in special cases, by methods of pressure which need not amount to actual compulsion, it will be possible to attain an increasingly firm grip on the evil elements of heredity."

A. B. WOLFE.

Oberlin College.

L'Emigration et ses Effets dans le Midi de l'Italie. By GIACOMO BARONE RUSSO. (Paris: Marcel Rivière et Cie. 1912. Pp. 225. 3.50 fr.)

In this interestingly written and carefully elaborated study, the author has presented a clear statement of the main causes which have led to the vast outward movement from Italy and of the most salient effects of this emigration upon the home country. According to Signor Russo, the primary impelling cause is economic. A large proportion of the emigrants (in Basilicata, 65 per cent) consists of peasants and agricultural laborers. Wages are low, ranging according to place and season from fifty cents to twenty-five and even twelve cents a day. "It is impossible to

live here," say many of the departing emigrants. "In our houses we live like beasts."

Against this background of the original misery of the emigrant, his low wages, his evil housing, his insufficient food, the poor soil split up into infinitesimally small holdings, the ravages of malaria, the absence of irrigation, of forests, of means of transportation—against this background, Russo throws a vivid picture of the good effects of emigration. The former abysmal misery is being alleviated; wages are rising so that "the proletarians see in emigration a resurrection and a liberation from their old slavery." With many of the objections to emigration now current in Italy, Russo has scant sympathy. True, some villages have been depopulated and Basilicata and Sicily are losing more through emigration than they are gaining through their excess of births over deaths. But this is not true of other southern regions, and in any case it is better that a population emigrate than remain where it is economically superfluous. It is claimed that emigration has cost Italy some 200,000 soldiers, but Russo believes that many of these would return if necessary to join the colors, and in any case war should not be the chief preoccupation of modern civilized nations. To the argument that lands have been deserted owing to the absence of peasants, he answers that these lands are below the margin of cultivation, and should remain uncultivated.

Everywhere Russo finds the beneficent influences of the rising flood of emigrants from Italy. He rejoices over the *grosses sommes d'argent* annually sent over from America, the vast new capitals in the savings banks of Southern Italy, the buying of small rural properties by the returned emigrants (the *Américani*), the new American markets for Italian wares, the new opportunities offered by the emigrants to the Italian merchant marine, etc. He finds the moral and political consequences equally favorable. Not the women of the emigrants but of the stay-at-homes fall into prostitution. The better economic conditions and greater refinement brought about by emigration have also led, according to Russo, to a diminution of brigandage, homicide, and acts of violence in general. The emigrant returns a better man, less narrow, wider awake, more careful of his appearance, able, perhaps, to read and write, and to speak English. He returns to build a better house than the neighboring huts in which "men, women, and beasts live in an immoral and unhygienic *mélange*." He takes an interest in political affairs. He brings back from America more than the mere dollars which he has earned.

While the main thesis of the book is that emigration from Southern Italy should not be hampered by any action of the Italian government, but should be protected and regulated by national laws or by an international treaty, the volume covers a wider field and presents much information (at second hand) concerning ancient, mediaeval and modern emigration, as well as sketches of British, Irish, German, Austro-Hungarian, Russian, Spanish and French emigration.

WALTER E. WEYL.

NEW BOOKS

DIEHL and MOMBERT. *Bevölkerungslehre. Ausgewählte Lesestücke zum Studium der Politischen Oekonomie*, VI. (Karlsruhe i.B.: G. Braun. 1912. Pp. 217. 2.60 m.)

GINI, C. *I fattori demografici dell'evoluzione delle nazioni*. (Torino: Bocca. 1912. Pp. 142. 4 l.)

HARDY, G. *Malthus et ses disciples*. (Paris: Génération Consciente. 1912. Pp. 48. 0.50 fr.)

HILLER, G. *Einwanderung und Kolonisation in Argentinien*. (Berlin: Dietrich Reimer. 1912. Pp. xi, 159. 5 m.)

OURWICH, I. S. *Immigration and labor. The economic aspects of European immigration to the United States*. (New York: Putnam's. 1912. Pp. xvii, 533. \$2.50.)
To be reviewed.

ISAACSON, E. *The Malthusian limit*. (London: Methuen. 1912. Pp. xvii, 30. 6d.)

KAREIEV, N. *La densité de la population des différentes sections de Paris pendant la Révolution*. (Paris: Champion. 1912. 2.25 fr.)

KRESSE, O. *Der Geburtenrückgang in Deutschland, seine Ursachen und die Mittel zu seiner Beseitigung*. (Berlin: J. Schwerins. 1912. Pp. 33. 0.75 m.)

LACOMBE, P. *L'appropriation du sol; essai sur le passage de la propriété collective à la propriété privée*. (Paris: Colin. 1912.)

MARCUSE, J. *Die Beschränkung der Geburtenzahl, ein Kulturproblem*. (Munich: E. Reinhardt. 1913. Pp. 151. 2.80 m.)

MONCKMEIER, W. *Die deutsche überseeische Auswanderung. Ein Beitrag zur deutschen Wanderungsgeschichte*. (Jena: Fischer. 1912. Pp. xii, 266. 9 m.)

PIQUET, V. *La colonisation française dans l'Afrique du Nord. Algérie, Tunisie, Maroc*. (Paris: Collin. 1912. Pp. x, 538. 6 fr.)

DE PISSAROVSKY, L. *Note sur les recensements de divers pays*. (Paris: Berger-Levrault. 1912. 1 fr.)

ROBERTS, P. *The new immigration. A study of the industrial and social life of southeastern Europeans in America.* (New York: Macmillan. 1912. Pp. xix, 386. \$1.60.)

ROBINSON, W. J. *Practical eugenics; four means of improving the human race.* (New York: Critic and Guide Co. 1912. Pp. 93. 50c.)

STEINHART, A. *Untersuchung zur Gebürtigkeit der deutschen Grossstadtbevölkerung.* Rechts- und staatswissenschaftliche Studien, 45. (Berlin: E. Ebering. 1912. Pp. 204. 6.50 fr.)

VAN INGEN, P. and TAYLOR, P. E. *Infant mortality and milk stations.* (New York: N. Y. Milk Com. 1912. Pp. 176. \$1.)

WOLF, J. *Der Geburtenrückgang. Die Rationalisierung des Sexuallebens in unserer Zeit.* (Jena: Fischer. 1912. Pp. xv, 253. 7.50 m.)

WRIGHT, R. R. *The negro in Pennsylvania; a study in economic history.* (Philadelphia: A. M. E. Book Co. 1912. Pp. 250. \$2.)

— *Mortality statistics 1909. 10th annual report with revised rates for intercensal years 1901-1909 based upon census of 1910.* (Washington: Census Bureau. 1912. Pp. 810. \$1.25.)

— *Dénombrement de la population, 1911.* (Paris: Ministère de l'Intérieur. 1912. Pp. 918. 7 fr.)

— *Bayern und seine Gemeinden unter dem Einfluss der Wanderungen während der letzten 50 Jahre.* (Munich: J. Lindeauer. 1912. Pp. vi, 302. 6 m.)

Social Problems and Reforms

NEW BOOKS

BAGNELL, R. *Economic and moral aspects of the liquor business and the rights and responsibilities of the state in control thereof.* (New York: Funk & Wagnalls. 1912.)

DEALEY, J. Q. *The family in its sociological aspects.* (Boston: Houghton Mifflin. 1912. 75c.)

DEVINE, E. T. *The family and social work.* (New York: Association Press. 1912. Pp. 163. 60c.)

ERNOUF-BIGNON. *Les institutions de prévoyance dans nos populations rurales.* (Paris: Amat. 1912.)

GAMBINO, R. *Le abitazioni populari nei riguardi economici e sociali.* (Palermo: Soc. Ed. Universitaria. 1912. Pp. 143. 3 l.)

GIBBON, J. G. *Medical benefit. A study of the experience of Germany and Denmark.* (New York: Dutton. 1912. Pp. xv, 296. 6s.)

GILLETTE, J. M. *Constructive rural sociology.* (New York: Sturgis & Walton. 1912. \$2.)

A sketch of the brief term of service of one who gave herself with definite purpose, splendid courage, and unusual equipment to the work of improving social conditions in New York city. Her achievement was particularly marked in the Congestion Exhibit of 1908, the shirt waist strike and the laundry investigation of 1909.

— *Organization for social work*. Proceedings, Vol. II, No. 4. (New York: The Academy of Political Science. 1912. Pp. iv, 236. \$1.50.)

Addresses and articles on social survey and social needs, by recognized experts.

— *Report of the American Federation of Labor Committee on Industrial Education*. (Washington: Sen. Doc. 936, 62 Cong., 2 Sess. 1912. Pp. 114. 10s.)

— *Recueil de documents sur les retraites ouvrières et paysannes*. (Paris: Berger-Levrault. 1912. 1.50 fr.)

Insurance and Pensions

The Business of Insurance. A Textbook and Reference Work Covering All Lines of Insurance. Written by eighty experts. Compiled and edited by HOWARD P. DUNHAM. In three volumes. (New York: The Ronald Press Company. 1912. Pp. xvi, 520; viii, 553; viii, 478.)

A collection of information on insurance is decidedly well worth making at this stage of insurance education. Some few articles have been specially written and there are addresses and essays by such well-known authorities as Edward R. Hardy, Frederick C. Moore, Levi G. Fouse, Robert Lynn Cox, Miles M. Dawson, and Frederick G. Hoffman.

Volume I is devoted to Fire and Life Insurance; volume II, to Accident Insurance, Liability Insurance and Special Insurance; and volume III includes a discussion of general topics—supervision of companies, office organization and insurance investments—together with sample forms of policies. Students of insurance will probably find volume II, parts V and VI, most valuable. In part V are excellent chapters, each written by a specialist, on premium rates, statistics and reserves, liability insurance by the state, and the historical development of liability insurance. Other chapters discuss settlement of losses, home office and agency management. Part VI is devoted to special forms of insurance, such as burglary, automobile, credit, fly-wheel, plate-glass, title, and surety insurance. At the close of each chapter is a very good bibliography and an excellent index. The bibliography is, however, confined almost wholly to works in English.

The work has the merit or defect, according to the particular reader, of having been written almost wholly from the viewpoint of the practical insurance man. Like most compilations, it lacks logical sequence; and a proper distribution of emphasis, at least for textbook purpose, is often lacking. It certainly will not be found "a comprehensive and authoritative textbook." However, it is a very valuable reference book and as such should be accessible to all students of insurance.

W. F. GEPHART.

Ohio State University.

Factory Mutual Insurance. The Achievements of Seventy-five Years. Compiled by EDWARD V. FRENCH. (Boston: The Arkwright Mutual Fire Insurance Company. 1912. Pp. 123.)

The origin, development, and the method of operation of the factory mutual system of insurance are described in this volume. The Arkwright organization was formed in 1835 at Providence, Rhode Island, and first insured textile factories, but later included other kinds of manufacturing establishments. The early mutual companies adopted the principle of controlling fire hazard by studying its causes and insisting that each member of the association adopt certain methods of construction and protection, thus obviously excluding large numbers of factories. The mutuals pay no commissions and have no agents as such. A premium based upon the past insurance cost is charged and at the close of the year any excess is returned. In the Arkwright Company during the past fifty years 48 per cent of the premium deposit has been returned. Prevention and not indemnification is the underlying note of the factory mutual companies.

W. F. G.

NEW BOOKS

FURST, A. *Die rechtsrechlichen Arbeiterkrankenkassen in Deutschland und England.* (Berlin: Puttkammer & Mühlbrecht. 1912. Pp. xvi, 165. 3.60 m.)

HENDERSON, C. R. *Industrial insurance in the United States.* Second edition. (Chicago: The University of Chicago Press. 1912. Pp. x, 454. \$2.)

For this second edition the author has added a few new tables, several titles to the bibliography, and two appendices containing the compensation acts passed by the New York legislature in 1910; but

the revision was made too soon to enable him to note that one of these laws has been declared unconstitutional by the New York Court of Appeals, and that the other is a dead letter because practically no employees have chosen to accept its provisions. Moreover, the work was brought out just before the adoption of real compensation or insurance acts by fourteen other states, and does not adequately represent the stage of progress attained even at the date of its publication. It is, therefore, unfortunate that publication should not have been delayed a little longer. Much that the book contains, however, is of permanent value, even though the illustrative material has to such a large extent become obsolete.

C. W. D.

HENDERSON, T. J. *Life insurance salesmanship*. (New York: The Spectator Co. 1912. Pp. xiii, 133. \$1.)

IRANYI, B. *Die Geschäfts-Resultate der österreichischen-ungarischen Lebensversicherungs-Gesellschaften und der ausländischen Lebensversicherungs-Gesellschaften in Oesterreich-Ungarn im Jahre 1911. 36 Jahrgang*. (Vienna: J. Eisenstein & Co. 1912. Pp. 24. 1.25 m.)

LOVAT-FRASER, J. A. *The national insurance act 1911. With introduction and notes*. (London: Waterlow & Sons. 1912. 5s.)

MOIR, H. *Life assurance primer; a text-book dealing with the practice and mathematics of life insurance, for advanced schools, colleges, and universities*. Third edition, revised and enlarged. (New York: Spectator Co. 1912. Pp. vii, 230. \$2.)

NASH, W. T. *The monthly income policy: its advantages and how to present them*. (New York: Spectator Co. 1912. Pp. vi, 40. 30c.)

ROBERTSON, W. A. and ROSS, F. A. *Actuarial theory. Notes for students on the subject-matter required in the second examinations of the Institute of Actuaries and the Faculty of Actuaries in Scotland, with numerous practical examples and exercises*. (London: Oliver and Boyd. 1912. Pp. 432, xxiv. 1s. 6d.)

ROBERTSON, W. A. *Insurance as a means of investment*. (London: Jack. 1912. 6d.)

WILLEY, N. *Principles and practice of life assurance. New and extended tables based on the American and combined experience mortality tables*. New explanatory text and additions by HENRY MOIR. Eighth edition. (New York: Spectator Co. 1912. Pp. 531. \$10.)

von ZWIEDINECK-SUDENHORST, O. *Arbeiterschutz und arbeiterversicherung*. Second edition. (Leipzig: B. G. Teubner. 1912. Pp. 143. 1.25 m.)

— *Mortality of government life annuitants. Report of the actuary of the National Debt Office, with graduated tables of experience*. (London: King. 1912. Pp. 298. 7d.)

— *National insurance. Official representations by the British Medical Association regarding the administration of medical benefit, and the reply of the joint committee thereto* (6328. 2d.). *Employment under the Crown. Second report of inter-departmental committee* (6315. 1d.). *Constitution of insurance committees. Form of orders made under section 78* (6349. 1d.). *Time for joining the approved society. Regulations* (259. 1d.). *Sanatorium benefit, etc. Order, 1912* (6358. 1d.). *Contributions of admiralty and army council in respect of seamen, marines and soldiers. Regulations* (238. 1d.). (London: King. 1912.)

— *National insurance act (Part II). Unemployment insurance. Decisions given by the umpire. Vol. I. Up to and including those published in "The Board of Trade Journal" for 15th August, 1912, with Index.* (London: Wyman. 1912. 8d.)

Pauperism and Charities

NEW BOOKS

ALLEN, W. H. *Modern philanthropy; a study of efficient appealing and giving.* (New York: Dodd, Mead. 1912. Pp. 16, 437. \$1.50.)

FELIX, M. *L'assistance-retraite aux vieillards de 65 à 69 ans.* (Paris: Rousseau. 1912. Pp. 150. 3.50 fr.)

GORIVAUD and VERGNOLLE. *Le domicile de secours en matière d'assistance publique.* (Limoges: Bureau à la Préfecture de la Haute-Vienne. 1912.)

HUNTER, H. *Problems of poverty. Selections from the economic and social writings of Thomas Chalmers.* (London: Nelson. 1912. Pp. 380. 1s.)

LALLEMAND, L. *Histoire de la charité.* Vol. IV. *Les temps modernes.* (Paris: Picard. 1912.)

MARBURG, J. *Die sozialökonomischen Grundlagen der englischen Armenpolitik im ersten Drittel des 19. Jahrhundert.* (Karlsruhe: G. Braun. 1912. 2 m.)

RAMBAUD, P. *L'assistance publique à Poitiers jusqu'à l'an V.* Vol. I. *L'assistance au moyen âge. La dominicale. La lutte contre la mendicité et le vagabondage.* (Paris: Champion. 1912. Pp. 663. 15 fr.)

— *Official report of the proceedings of the second national conference on the prevention of destitution.* (London: King. 1912. 10s. 6d.)

Socialism and Co-operative Enterprises

Principles and Methods of Municipal Trading. By DOUGLAS KNOOP. (New York: The Macmillan Company. 1912. Pp. xvii, 409. \$3.25.)

The scope, development, extent, management, and financial aspects of municipal trading constitute the first five chapters of

this book; selling policies are described at considerable length in chapter 6 under the head of water, gas, electricity, and tramway undertakings. Chapter 7 deals with the labor policy of municipal trades, and chapter 8 with the results of municipal trading, especially in England and Germany, while chapter 9 gives a good summary of the preceding chapters. This is followed by ten pages of appendices, including a bibliographical note, a list of municipal tramway undertakings in the United Kingdom, two statistical tables, and a good index.

While a great deal of undigested material has been issued upon the subject of municipal trading in the form of statistics, pamphlets and chapters in general works, there are few, if any, comprehensive treatises upon the subject such as this is, and for this reason the work commands attention, although the author's investigations are confined largely to Great Britain with rather incidental comparisons with Germany.

In general the functions of local government, according to the author, are either political or economic: they are political when the services rendered are in part or wholly for the common good and paid for out of funds provided by taxation; they are economic when performed primarily for the benefit of the individual members of the community, not for the community as a whole, and are paid for by the consumers. Now, where a local authority undertakes an economic enterprise the cost of which is met entirely from the receipts obtained by the sale of the product or the service in question, "a trading enterprise clearly exists, and the undertaking of such an enterprise by a local authority is described as municipal trading, whether the local authority be technically a municipality or not and whether the receipts of the undertaking are actually sufficient to meet the total expenditure or not." Either of two general policies may be pursued. The trading enterprise may be managed on a self-supporting basis or it may be subsidized from rates, for sanitary or other reasons. In the choice of policy it is necessary to consider: Is the undertaking suitable for management by a local authority? Is it administered on a sound financial basis? Is the selling policy equitable? What is the relation of the management to the workers? Is the scheme of management the best that can be devised?

Some of the more significant conclusions are: that the policy of municipal trading has, with few exceptions, been planned with little or no scientific attention from local authorities; that the

results in Germany are more satisfactory than in England; that unsatisfactory results are largely due to incompetent, low-salaried officials who curry favor with the present voters rather than plan for future welfare; that municipal trading in itself is undesirable and should not be engaged in unless it is clearly established that private management would give less satisfactory results.

Obviously the work is written from the *laissez faire* point of view and a more extended study of German municipal trading, which in many instances has been highly satisfactory, might have led the author to different conclusions in some particulars, but this is frankly admitted (p. 387). On the whole, the work is a careful examination and critical analysis of the subject and the conclusions seem warranted and justified by an array of facts thoroughly mastered and well handled. The style is somewhat prolix, which may be excused because of the complexity of the subject, involving as it does many relations and close discriminations.

KARL F. GEISER.

Individualism and the Land Question. By SIR ROLAND K. WILSON, J. H. LEVY, and others. (London: The Personal Rights Association. 1912. Pp. 120. 1s.)

Taxation and Anarchism. By AUBERON HERBERT and J. H. LEVY. (London: The Personal Rights Association. 1912. Pp. 72. 1s.)

In the former book Sir Roland Wilson opens an interesting debate on the nationalization of land, proposing that the state convert all existing freehold and copyhold estates into rent-free leaseholds for fifty years. Mr. J. H. Levy, who discussed the question years ago with John Stuart Mill and who advocated the municipalization of land before the time of Henry George, spoke in opposition to the scheme as savoring of socialism. Mr. Levy's own proposal involves the creation of a Land Redemption Fund out of intestate estates, obsolete endowments, and the gifts and bequests of patriotic landowners. Both of the chief debaters strongly opposed the single tax of Henry George, favoring compensation of some kind, while Mr. Greevy Fysher, Mr. Evershed and the other debaters, all individualists, opposed the nationalization of land altogether, as involving a restriction of liberty.

The latter book contains the letters of Mr. Levy and Mr.

Herbert in their controversy on compulsory taxation. Mr. Levy, though a pronounced individualist, defends compulsory taxation and classes Mr. Herbert as an anarchist because he held that all public revenue should be derived from voluntary contributions. Both books are well worth reading.

J. E. LEROSSIGNOL.

University of Nebraska.

NEW BOOKS

BEBEL, A. *My life.* (London: Unwin. 1912. Pp. 344. 7s. 6d.)

CANTONO, A. *Storia del socialismo italiano.* (Torino: Lib. Ed. Internazionale. 1912. Pp. 88. 1.20 l.)

DI CARLO, E. *Della filosofia della storia di Ferdinand Lassalle.* (Palermo: A. Trimarchi. 1911. Pp. 34. 1 l.)

GARRIGUET, L. *L'évolution actuelle du socialisme en France.* (Paris: Bloud & Cie. 1912. 2.50 fr.)

HUTCHINS, B. L. *Robert Owen, social reformer.* Fabian biographical series, 2. Tract No. 166. (London: Fabian Society. 1912.)

HYNDMAN, H. M. *Further reminiscences.* (London: Macmillan. 1912. 15s.)

METLAKE, G. *Christian social reform. Program outlined by its pioneer, William Emmanuel Baron von Ketteler, Bishop of Mainz.* (Philadelphia: Dolphin Press. 1912. Pp. 4, 246. \$1.50.)

OPPENHEIMER, F. *Die soziale Frage und der Sozialismus.* (Jena: Fischer. 1912. 1.20 m.)

ORTH, S. P. *Socialism and democracy in Europe.* (New York: Holt. \$1.35.)

PAECH, E. *Die wirtschaftliche Bedeutung des kleingewerblichen Genossenschaftswesens. Eine sozialwissenschaftliche Studie.* (Halle: E. Anton. 1912. Pp. iv, 124. 3.50 m.)

THOMPSON, C. D., editor. *Socialist campaign book.* (Chicago: National Headquarters Socialist Party. 1912. Pp. 352.)

TREVISONNO, N. *Socialismo e sindicalismo.* (Rome: B. Lux. 1912. Pp. iv, 177. 2 l.)

VANDERVELDE, E. *La coopération neutre et la coopération socialiste.* (Paris: Alcan. 1912. Pp. 227. 3.50 fr.)

A history of the relation between socialism and coöperation from the time of Buchez and Robert Owen down to the international socialist congress at Copenhagen and the international coöperative congress at Hamburg in 1910.

VAUGHAN, B. *Socialism from the Christian standpoint: ten conferences.* (New York: Macmillan. 1912. Pp. 389. \$1.50.)

WARWICK, WELLS, and TAYLOR. *The great state*. (New York: Harper, 1912. Pp. 379.)

— *Report on profit-sharing and labour co-partnership in the United Kingdom*. (London: Board of Trade, Labour Dept. 1912. Pp. 160. 8*1/2*d.)

Statistics and Its Methods

La Distribuzione dei Redditi nelle Province e nelle Grandi Città dell'Austria. By FRANCO SAVORGNA. (Triest: Museo Commerciale, 1912.)

Despite the unsatisfactory fiscal results of the income tax established in Austria in 1896, the administration of the tax has yielded an unusually valuable body of statistical data relating to the distribution of wealth. The tax is a direct levy upon all incomes of more than 2,000 crowns. Progressive improvements in its administration have greatly increased the number of tax-payers, but there is nothing in the general trend of the changes thus introduced in the statistics yielded by the tax that indicates that evasions of the tax are distributed either geographically or among various economic classes in other than a fairly random fashion.

The statistics for the period from 1896 to 1904 have been surveyed in some detail by F. Leiter (*Die Verteilung des Einkommens in Oesterreich*. Vienna; 1907). Pareto's income curve has been fitted to the figures for the year 1899 by M. Pierre des Essarts (*Journal de la Société de Statistique de Paris*, XLIII, 222-225). The latest study is the title noted above, by Professor Franco Savorgnan of the High School of Commerce of Triest. Savorgnan's work is given an especial interest by his use of the index of the inequality of the distribution of incomes recently devised by Corrado Gini (*Indici di Concentrazione e di Dipendenza*, in *Biblioteca dell'Economista*, series V, vol. XX, 1910).

Gini's index may be readily understood by comparing it with the well-known index of Pareto. If n be taken to represent the number of persons whose income is greater than x , and if the sum of the incomes individually greater than x is represented by S , Pareto's equation will read, $\log n = \log A - \alpha \log x$, and Gini's will read, $\log n = \delta \log S - \log K$, where α , δ , A , and K are constants derived from the given statistics. Pareto assumes that n is an algebraic function of x , the limiting income, while Gini makes n an algebraic function of S , the total amount of the in-

comes individually larger than the specified limit. Gini's index of the inequality of the distribution of incomes is the constant δ , which, like Pareto's α , measures the slope of the straight line which is the graph of the equation. Pareto's index measures in a general way the rate at which income receivers thin out as we pass from the lower to the higher income groups. Gini's index measures in a similarly general fashion the rate at which the number of income receivers increases as, shifting the lower limit of the incomes considered from the maximum toward the minimum, we bring under our survey successively larger portions of the total amount of incomes.

Although α is supposed to be used as a measure of "inequality" in the distribution of incomes, it is clear that (through an increase both in the size of the largest incomes and in the relative numbers of the receivers of large incomes) a massing of a larger percentage of the total income in the hands of a few income receivers may be accompanied by a decreasing value of α . Even without an increase in the size of large incomes, a smaller value of α may often result from what would generally be deemed an increased concentration of wealth. Gini's index, however, is larger or smaller according as what in the generally accepted usage is inequality in the distribution of incomes is larger or smaller. Pareto's index is really a measure of the unevenness with which income receivers are distributed over the existing income range—whatever this range may happen to be. Gini's δ , on the other hand, indicates the inequality in the numbers of the income receivers who get the various aliquot parts of the total income. Moreover, δ has the further advantage that it approaches unity as the distribution of incomes approaches absolute uniformity and that Gini's equation fits the general run of income statistics more accurately than does Pareto's.

For Austria as a whole Savorgnan finds the following values of δ : 1898, 2.79; 1904, 2.70; 1908, 2.79. Among the provinces the inequality of income distribution is greatest in Lower Austria (3.29 in 1908), Vorarlberg (2.76), Silesia (2.59), and Bohemia (2.58). The distribution is least unequal in Dalmatia (1.91) and Tyrol (2.13). Incomes are classified in the published statistics under six heads, according to source and nature, but there does not seem to be any marked correlation between the dominance of particular kinds of income in a province and its ranking as regards the inequality of incomes. It is clear, however, that the provinces

in which the concentration of incomes is most marked are those in which the average income is highest and in which industry and commerce are most highly developed. In most of the larger cities, concentration is greater than in the other districts of the respective provinces. In Vienna the value of δ for 1908 was 3.44.

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NEW BOOKS

DRYSDALE, C. V. *Diagrams of international vital statistics. With description in English and Esperanto. Together with a table of correlation, co-efficients between birth and death rates, etc.* (London: Bell. 1912. 6d.)

KAUFMANN, A. *Lehrbuch der Statistik.* (Tübingen: J. C. B. Mohr. 1912.)

SIGERIUS, A. *Handelsbetriebsstatistik.* (Leipzig: B. G. Teubner. 1912.)

ZIZEK, F. *Soziologie und Statistik.* (Leipzig: Duncker und Humblot. 1912. Pp. 46. 1.50 m.)

— *Infant mortality. Report of the special committee appointed by the council of the Royal Statistical Society to enquire into the systems adopted in different countries for the registration of births (including stillbirths) and deaths with reference to infantile mortality.* (London: Royal Statistical Society. 1912. Pp. 61. 1s.)

A questionnaire was sent to 183 registration officers in various countries, states, and provinces, and replies were received from 103. Contains a brief sketch of the history of registration followed by a discussion of practice, treatment of stillbirths, and statistical methods. This is a most convenient report and especially valuable to the student of vital statistics.

— *Official year book of the Commonwealth of Australia containing authoritative statistics for the period 1901-1911 and corrected statistics for the period 1788 to 1900.* (Melbourne: Commonwealth Bureau of Census and Statistics. 1912. Pp. xl. 1277.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

Of the eleven volumes of reports of the thirteenth census, vol. 9, dealing with manufactures by states and cities, is the first to be published (Washington, 1912, pp. 1404). This is simply a combination of the several state bulletins already published.

Special emphasis is laid in the *Report of the Secretary of the Interior, 1912*, on the need of a definite and comprehensive water-power policy (pp. 16-23). This document also contains a review of the decade of national irrigation work under the Newlands act of 1902 (pp. 25-32).

It is announced that the statistical work of the American Iron and Steel Corporation, hitherto carried on by Mr. James M. Swank, will be transferred to the American Iron and Steel Institute. Mr. Swank retires from active work after a service of forty years, and Mr. William G. Gray will become the responsible head of this branch of the Institute's service.

The *Report of the Proceedings of the Seventh International Congress of Dry Farming*, held at Lethbridge, Alberta, October 21-25, 1912, may be had upon application to Mr. John T. Burns, executive secretary-treasurer, Oklahoma City, Oklahoma.

Circular No. 163, issued by the Agricultural Experiment Station of Illinois, is devoted to a brief statistical study of the relation of the United States to the world's beef supply (Urbana, July, 1912, pp. 11). There are charts showing, for different countries, cattle per capita, cattle per square mile, and exports of beef and cattle from the United States.

A pamphlet on *Bolivia*, prepared by the Bolivian Legation, may be had of the Pan American Union (pp. 72). A map with a considerable amount of statistical material dealing with the Argentine Republic in 1911 has been prepared by Dr. Peña and may be had upon application (Comité Argentino, Buenos Ayres, 753).

The International Institute of Agriculture (Rome) has published its first year book, *Annuaire Nationale der Statistique Agricole, 1910* (1912, pp. 324). For the first time comparative statistics are presented for a large number of countries, with uniform denominations of measure and weight. The volume, for fifty countries, reports upon the area and population of each, the distribution into productive

and non-productive areas, and the distribution of productive areas into the seven categories of arable lands, pastures and meadows, vineyards, gardens, orchards and other crops, woods and forests, and marsh, heath and waste lands. The statistics cover the decennial period 1901-1910.

Corporations

The *Report of the Investigation of the Chicago Telephone Company*, submitted to the Committee on Gas, Oil and Electric Light, by Edward W. Bemis (Chicago, 1912, pp. 127), is based upon a detailed appraisal of the physical property of the Chicago Telephone Company. The records of this appraisal fill ten typewritten volumes, and were made by a force of 160 men working for about a year, plus 60 men working for an additional two months, at a total cost of a round quarter of a million dollars.

The appraisers proceeded upon the theory that the true value of the plant was its total cost of reproduction new, less depreciation. This appraisal gave a total reproduction value new of the physical property within the city of Chicago amounting to \$34,825,894. To this sum was added \$564,636 for plant development expense and \$4,753,993 for cost of developing business. Professor Bemis disallowed the latter items, contending that, whether called for or not by the theory of valuation upon the basis of cost of reproduction, they did not represent expenses actually incurred or were amply covered by accrued profits. He then made a critical examination of the appraisal of the physical property, and concluded that items amounting to \$2,065,947 should be rejected. His final conclusion was that reductions of rates calculated to reduce the reported income of the company by \$700,000, that is a trifle less than 7 per cent of the gross receipts for 1911, were warranted by the evidence.

The significance of this report to the economist lies in the evidence it affords concerning the merits of the theory of cost of reproduction as a method for the valuation of public utilities. Professor Bemis deliberately rejects this theory as applied to certain details of the valuation, and casts some doubt upon its soundness in principle. The report is printed for distribution.

A. N. HOLCOMBE.

Reference was made in the last number of the REVIEW (vol. II, p. 964) to the work of the Department of the National Civic Federation on Regulation of Utilities (1 Madison Ave., New York). Additional pamphlets have been issued in two groups. The first repre-

sents parts of a compilation and analysis of public utility regulation laws of the United States on the following subjects:

Basis of Rate Making (pp. 43);
Regulation of Intercorporate Relations (pp. 17);
Regulation of Accounting Practices (pp. 32);
Publicity of Rates (pp. 62);
Franchises (pp. 42);
Regulation of Stock and Bond Issues (pp. 57).

Another series deals with the drafting of a model public utilities bill. This investigation promises to be of exceptional value, for it deals with actual conditions and laws. The inquiry has been extended to England, with particular reference to the sliding-scale principle, the regulation of capitalization, public audit, and methods of selling stock at auction.

President Percival S. Hill, of the American Tobacco Company (111 Fifth Ave., New York), has issued a typewritten statement under date of November 18, 1912, discussing the new competitive conditions created under the dissolution decree of the United States Circuit Court. A reason is given for the rise in price of the subsidiary stock. There is also an interesting explanation why price cutting in the tobacco industry does not increase the volume of manufacturing business.

The Harbor and Subway Commission of Chicago has published a *Supplemental Report on a Comprehensive System of Passenger Subways* (No. 30, 1912, pp. 24), in which the criticisms of its former recommendations are analyzed and answered. There is a chart to illustrate the "rush hour" traffic.

The Railway Business Association has reprinted two of the addresses delivered at its annual dinner, Dec. 19, 1912: "The Country's Need of Greater Railway Facilities and Terminals," by James J. Hill (pp. 15) and "The Canadian Method of Preventing Strikes and Lockouts," by W. L. Mackenzie King (pp. 20).

The Stone and Webster Public Service Corporation (Boston), has issued a separate reprint of "Valuation of Public Service Properties," by L. R. Nash, originally published in the October, 1912, issue of the journal published by this corporation.

Prompted by the recent controversy over the operations of the New York, New Haven and Hartford Railroad, the Board of Railroad Commissioners of Massachusetts, in its annual report for 1912,

enters into a general discussion of railroad policy and the position to be taken by the state (pp. 73-89).

The Bureau of Railway Economics, in Bulletin No. 39, makes a study of *Comparison of Capital Values: Agriculture, Manufactures and Railways* (Washington, pp. 38). Census figures for 1910 are utilized.

On October 23, 1912, the Railroad Commission of the State of California adopted uniform and compulsory systems of accounting for the gas, water, and electric corporations operating in the state and coming under the jurisdiction of the commission (*Uniform Classification of Accounts for Gas Corporations Prescribed by the Railroad Commission of the State of California. Adopted October 23, 1912. Effective January 1, 1913. For Electric Corporations. For Water Corporations*, pp. 63, 69, 54). Each classification is in accordance with section 44 of the law of 1911, known as the Public Utilities Act, and went into effect on January 1, 1913. The general plan of classification is the same for all three classes of corporations, providing in each case (1) balance sheet accounts, including such asset, liability, capital stock and surplus accounts as are usually placed in the general ledger and balance sheet; (2) detailed property or plant accounts; (3) the general income accounts which are necessary for a periodical revenue and expense statement; (4) corporate surplus or deficit accounts; (5) detailed revenue accounts; (6) detailed expense accounts, and (7) so-called clearing accounts. The accounts under 1, 3, 4, and 7 are practically the same in all three classifications, while those under 2, 5, and 6 differ a great deal. Thus a high degree of uniformity is secured between the accounts of all three kinds of corporations, without preventing special adaptations to the particular kind of business. On the whole, the classifications are admirably worked out. But there is one serious oversight: no provision is made to show functional costs—the costs per unit of service—which perhaps would furnish even more useful information than will the detailed expense accounts that are provided.

J. BAUER.

Labor

FEDERAL WORKMEN'S COMPENSATION. The workmen's compensation law affecting certain employees of the United States government has been in operation for several years, but despite the great public interest in the general subject very little attention has been directed toward it. *The Opinions of the Solicitor for the Department of Com-*

merce and Labor dealing with Workmen's Compensation (Washington, 1912, pp. 646) will be of great assistance to those engaged in administering similar acts in the various states. The volume also contains the opinions of the Attorney General and the decisions of the Comptroller of the Treasury. The report covers a period of four years ending August first, 1912.

The act of May 30, 1908, grants compensation to artisans and laborers employed by the United States who receive, in the course of their employment, injuries not caused by their negligence or misconduct, the effect of which lasts more than fifteen days. It applies to employment in "manufacturing establishments, arsenals or navy yards, or in the construction of river and harbor or fortification works or in hazardous employment on construction work in the reclamation of arid lands . . . or in hazardous employment under the Isthmian Canal Commission." The act has been extended by amendment to cover all employees of the Canal Commission and all employees engaged in hazardous work under the Bureau of Mines, the Forestry Service, and the Lighthouse Service. The Secretary of Commerce and Labor is entrusted with the administration of the act except as to the employees of the Isthmian Commission who, since the amendment of March 4, 1911, have been under the charge of the chairman of that commission. The amount of compensation is limited to one year's pay; if the employee is killed his dependents receive this amount.

The laws now in force in many states are all more liberal than the Act of Congress, but many questions similar to those which will arise under them have been considered by the Solicitor in construing the United States law. The limits of this review will allow us to consider only one feature of the law. The act of May 30, 1908, differs in phraseology from the English law in one important particular. Under that law the employer is liable for injuries due to accidents "arising out of and in the course of" the employment. The United States law covers all injuries received "in the course of" the employment. The Solicitor points out that the United States law is broader than the English law (p. 232) and covers injuries received while at work though they may not be due to the prosecution of that work. The distinction is a fundamental one. The object of the new laws has been to redistribute the burden of industrial injuries. Under the old law of liability a large part of the burden fell on the injured employees themselves. This was considered unfair and an attempt has been made to impose on industry the burden of injuries due to its

operation. Under this scheme those injuries only should be compensated by the industry which are caused by it. There is no more reason for including an injury received by a man while at work which was not caused by his employment than for including an injury received by that man while at home.

The laws of many of the states are the same in phraseology as the English law, but in several of them the wording is similar to the United States law. Under that law, as construed by the Solicitor, all injuries, though not caused by the employment, are to be compensated provided they were received while the employee was at work. In these states, therefore, industry will be burdened by the cost of injuries not caused by its operations.

A careful consideration of the able opinions contained in this volume shows clearly the narrow scope of the act: it applies to a small portion only of the government service; the amount of compensation is limited to one year's pay; there is no provision for medical attendance; the employee receives no compensation if the injury is due to his negligence. The rulings of the Solicitor on this last point have been liberal, but it is a part of the law which might, under a technical interpretation, prevent the allowance of meritorious claims.

The act even with its limitations represents an advance over the former law. It has greatly benefited the government employees covered by it (p. 11). The Secretary of Commerce and Labor considers it to be a good law and has advised that its provisions be extended. It is to be hoped that the Congress will act on his suggestion.

JAMES A. LOWELL.

STATE INDUSTRIAL INSURANCE IN WASHINGTON. To the voluminous account of the first year's operation of the Washington workmen's compensation act (*First Annual Report of the Industrial Insurance Department. For the Twelve Months Ending September 30, 1912*, Olympia, 1912, pp. 516) much interest attaches, for the act is from various points of view remarkable. Alone among American acts it is compulsory—compulsory upon all employers in the extra-hazardous trades. With only one other state it shares the distinction of providing a state insurance system; more exactly, in the phrase of the report, "state administration of collective funds." It makes little attempt to relate the awards payable to the rates of wages of the injured or deceased workmen. There is generally no limitation of the period of award to three years or six years as is common in other acts. Payments, sometimes commutable to lump sums, may endure as long

as the consequences of the accident endure. Widows may draw pensions till they die; no other state so provides. The reserve for pension cases is limited to \$4,000, but there is no other limitation on the amount payable. The criticism has been made that the Washington act, not measuring awards by wages, is essentially a poor-relief system; but the criticism is pointless since all modern compensation acts rest first of all upon a desire to deal comprehensively and adequately with a blameless kind of dependency. The Washington act has emerged successfully from the purgatory of the courts. Assailed as unconstitutional on four grounds it was held by the state supreme court to violate "no provision of either the state or federal constitutions,"¹ the previous decision of the New York court notwithstanding.

Indications are that this complicated law has well approved itself in its first twelve months. The various hazardous trades are grouped by classes, and percentages of the pay-rolls are levied as premiums; the percentages vary from 1.5 per cent as in cordage establishments to 10 per cent in powder works. The "accident fund" is composed of forty-seven different parts, no one of which is liable for a depletion of the fund from accidents happening in any other class. Class 10, including operation and repair work in connection with "logging; saw mills; shingle mills; lath mills; masts and spars with or without machinery," is found to be particularly large, comprising 42,164 of the 138,084 employees protected last year. In this class were 46 per cent of the 279 fatal accidents. Of all workmen killed, nearly half were foreigners. Total accidents reported were 11,896. Claims fully and finally awarded were 6,356; rejected were 378. Twenty-five days' disability were averaged. Claims suspended were 1900, chiefly because the workmen, their injuries being trivial, had not themselves presented claims; but partly because claimants could not be located. In 150 pages of the report are reproduced by classes of risk, the names of all contributors to the fund and their respective payments, claims, and awards.

The administrative costs of the system have not exceeded expectations and have not been, as such costs go, high. The legislature had appropriated \$150,000 for twenty-two months' expenses. The theory, be it recalled, is that every dollar collected from employers should go for compensation. In the first sixteen months—four of organization, twelve of operation—the actual expense fell slightly (by \$1200) under the allowable average. Expenses consumed 9.9 per cent of income. The remaining 90.1 per cent were the sums, totalling \$980,445,

¹ *State ex rel. Davis-Smith Co. vs. Clausen, State Auditor*, 65 Wash., 156.

collected from employers. Claims paid were 40.9 per cent of income; the reserve fund for the continuing pensions was 22.4 per cent; cash in the fund was 26.8 per cent. Beyond doubt the expense rate has been kept commendably low, yet the comparison made by the report with the German rate of 12.8 per cent is not at all appropriate, because of the unreckoned differences of the systems. The expense rate was in part kept low by the successful avoidance of the costly intercession of professional claim experts. This was accomplished by securing the facts about accidents from workmen, employers, and physicians, each on different elaborate forms, and then by a process of cross-checking. In passing be it said that inserted samples of these and other forms are an interesting adjunct of the report. The commission has made investments of reserve funds in public bonds yielding 5 per cent to 6 per cent, and averaging 5.156 per cent, a fortunate return hardly possible in the East.

Although accidents were reported for 12,000 persons, "a surprisingly small number give any evidence of an attempt to either deceive the compensating board or obtain money by false pretenses." The aid of an expert railroad-claims investigator was utilized when fraud or malingering was suspected. No suits for fraud were filed. But 43 suits were filed against defaulting employers for premiums due. The extraordinarily small number (21) of appeals from compensation decisions "is due to the short period allowed for appeals, the unfamiliarity of claimants and attorneys with the procedure for appeal, the certainty and rigidity of the award schedules and the state-wide disposition to give the law a fair test in practice, even though numerous claimants have been silently dissatisfied with the amount awarded by the commission."

To the recommendations of the commissioners special interest attaches since initially all compensation acts are experimental. They urge that no general increase in the scale of awards be made. Though scarcely any other state pays so liberally, the Washington Federation of Labor had asked for an increase. But for special classes an increase is recommended: for the dependents of minor workmen, for workmen totally disabled permanently; for widows with children. In the last case the maximum award should be increased from \$35 to \$45 per month to apply to families where there are a number of small children. By these three recommendations the relief character of the act is, wisely enough, further emphasized.

It is recommended that casual employers in construction work be required under penalty to notify the commission of their work at its

beginning. Elsewhere the report had dwelt on the distressing difficulty experienced in reaching casual employers; the present recommendation merely grazes the problem. It is proposed that the inspection "of dangerous machinery and agencies and of conditions conducive to accidents, including boilers and logging operations" be placed under the jurisdiction of the commission, which should also have power to establish minimum standards of safety. Elsewhere praise had been given the Wisconsin system which in this matter resembles the German. Power is also sought for the commission to reduce the rates of well safeguarded establishments—a common European practice or provision. A chair of industrial safety, with provision for extension work, should be established at the state university. Other recommendations concern hospital funds, first aid, the use of voucher checks and other matters.

The unsolved difficulties of casual employment, the compulsory inclusion of occupations not highly hazardous, the need both for greater adequacy of administration and for pruning of costs, these and other problems will be the ground for recommendations in many years to come. Yet one year has answered the doubters: an American state, not an old one at that, can by any reasonable test beneficially wield a complicated piece of social legislation.

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COMPENSATION FOR INDUSTRIAL ACCIDENTS IN MASSACHUSETTS. In 1910 a commission was appointed in Massachusetts to determine upon a plan for compensating workers for injuries received in the course of their employment (Ch. 120, *Resolves* of 1900). This commission made a preliminary report in 1911 (see REVIEW, vol. I, p. 899), which resulted in legislation. The final *Report of the Commission on Compensation for Industrial Accidents* (July 1, 1912, pp. 322) has now been submitted. This contains a statement of the commission's work, summaries of foreign and American compensation acts, a brief on the constitutionality of compulsory compensation, and reprints of the text of existing American compensation acts, with an explanatory commentary on the act of Massachusetts.

On the general problems of compensation legislation the most interesting part of the report is that devoted to the commission's study of Massachusetts industrial accidents from May 1, 1911 to July 1, 1912. During this period, employers were required by legislation to report their accidents to the commission. On the information contained in these reports the commission has tabulated and reported

only facts relating to the frequency and seriousness of accidents for the period between May 1, 1911 and May 1, 1912. The original purpose of this study was to determine the cost of compensation and to work out a fair schedule for the act. Unfortunately, the present Massachusetts compensation schedule was prepared before the commission's study was fairly under way and as yet no changes in the schedule have resulted from it. The results of the study are, however, presented by the commission "for the purpose of affording a basis for the calculation of the cost of compensation under the new law."

The report states that the figures presented cannot be relied upon for the purpose of fixing insurance rates for any individual employer. The commission did not have accurate information as to the number of employers or employees engaged in the various industries in the state; nor is there any means of determining whether all of the accidents which occurred during the period covered were reported. Moreover, the period studied was too short to furnish dependable statistics. The result is, as the commission frankly states, that its figures do not accurately represent either the number of accidents or the seriousness of the consequent disability. The value of these statistics as a basis for generalization may be estimated from the following statement contained in the report:

The commission is well aware, as has been repeatedly pointed out, that these statistics contain defects which could not be eliminated, but a majority of the commission believes that it is justified in presenting the data that it obtained in the course of its investigations even though fuller information derived from experience under the new law may hereafter disclose defects not now apparent.

As the report points out, the statistics tabulated disclose some interesting tendencies. Table 2, distributing injuries in accordance with the German classification showing for each industry the number of establishments, the number of employees, and the number of accidents fatal and non-fatal, shows a death-rate of .45 per 1,000 employees. This rate compares with .80 in Germany and .70 in Austria. Commenting on this low rate, the commission says: "This is probably due to the fact that the industries of this state are so largely of a non-hazardous character. It is well known that the textiles, boots and shoes, and other light factory industries, while they entail a considerable number of minor injuries, do not cause many deaths."

Perhaps the greatest value of the work done by the commission during the period of this study has been the education of employers to report accidents and the formulation of a classification and methods

of tabulation which will be of value to the Industrial Accident Board, which on July 1, 1912, took up the permanent work of collecting and tabulating statistics with relation to the causes and the cost of industrial accidents.

THOMAS I. PARKINSON.

In the summary by Miss Wells, of the nineteen-volume report on *Condition of Woman and Child Wage-Earners in the United States*, published in the REVIEW for June, 1912, page 436, no mention was made of volumes 13, 14, 17, 18, and 19. Volume 13, *Infant Mortality and its Relation to the Employment of Mothers*, has now appeared (Sen. Doc. No. 645, 61 Cong., 2 Sess., 1912, pp. 174). Part I is a study of Massachusetts statistics by Edward B. Phelps; and Part II is a more intensive study, restricted to Fall River, Mass. Volume 17 deals with the *Hookworm Disease Among Cotton Mill Operatives*, prepared by C. W. Stiles (pp. 45).

The Bureau of Labor has also made a *Report on Strike of Textile Workers in Lawrence in 1912* (Sen. Doc. No. 870, 62 Cong., 2 Sess., pp. 511). This is a most careful investigation presenting the documentary material in regard to the strike; the wages and hours of labor, and conditions of work; housing conditions; retail prices and cost of living. Wage data were secured from the pay-rolls of 21,922 employees, or about one half of the total population in Lawrence of working age. Nearly one fourth of the total number earned less than 12 cents per hour.

The "American Labor Legislation Review" for December, 1912, is devoted to *An Immediate Legislative Program*. The docket of pending reform is one day of rest in seven, protection from lead poisoning, uniform reporting of accidents and diseases, compensation of federal employees for accidents and diseases, state workmen's compensation legislation, the investigation into industrial hygiene and safety, protection for working women, and enforcement of labor laws. Useful extracts from documents and reports, with references, are given, designed to be of assistance to those engaged in campaigning for the foregoing objects. Maps and charts are included, and altogether the volume is a most important compendium.

The Department of Agriculture has again reported upon *Wages of Farm Labor* (Washington, Nov. 7, 1912, pp. 72). This represents the nineteenth investigation, the first being undertaken in 1866, and the last previous one in 1906. The inquiry is edited by George K. Holmes.

Mr. Holmes has also prepared for the Department of Agriculture

a bulletin on *Supply of Farm Labor* (Nov. 9, 1912, pp. 81). This is announced as the first comprehensive treatment of farm labor on the side of supply that has been published.

Some scattered data in regard to the methods and purposes of the Industrial Workers of the World may be found in *Report of Harris Weinstock* who was appointed by Governor Johnson of California a commissioner to investigate the recent disturbance in the city of San Diego (Sacramento, pp. 23).

The West Virginia Mining Investigation Commission appointed by Governor Glasscock in August, 1912, has made its report of *Investigation into Strikes in Kanawha County*.

The third issue of the Child Labor Bulletin (105 East 22d St., New York) contains a summary of legislation for the year ending September 30, 1912.

The Illinois Bureau of Labor has published a pamphlet containing suggestions in regard to the operation of the workmen's compensation law which went into operation May 1, 1912. The bureau is also publishing as occasion needs a series of pamphlets on questions arising in regard to the consideration of the law. These pamphlets as well as the text of the act may be obtained from the secretary at Springfield, Illinois.

Money, Prices, Credit, and Banking

"THE EQUATION OF EXCHANGE" FOR 1912, AND FORECAST. The following is a preliminary statement of the equation of exchange for 1912. It is constructed without the aid of the index number of prices of the Bureau of Labor or of the statistics of volume of trade from the Bureau of Foreign and Domestic Commerce, neither of which is yet available. In place of the Bureau of Labor statistics for the price level, I have used Bradstreet's index number; and in place of fuller statistics on the volume of trade, I have taken the median percentage increase of the figures of 1912 over those of 1911 for the following nine items: cotton production, oats, railroad gross earnings, tobacco, rye, wheat, corn, pig iron, and barley, the cotton having shown a decrease and all the others, an increase in the order given.

Bradstreet's index number showed an increase of 5.4 per cent for 1912 compared with 1911, which agrees closely with the figures (5.3 per cent) of Mr. Coats for Canada based on 260 commodities and is not far from the figure (6.2 per cent) of the "Economist" for England.

The figure for velocity of circulation of money is assumed arbi-

trarily to be 21 times a year on the basis of the calculations given in *The Purchasing Power of Money*. The other figures for (1) money in circulation, (2) deposits subject to check and (3) their activity or velocity of circulation, are calculated by the same methods as those described in last June's article, "The Equation of Exchange for 1911 and Forecast."

The two sides of the equation of exchange thus calculated agree within about 2 per cent, and to make them agree perfectly I have altered the figure for the volume of trade from \$444,000,000,000, as first calculated, to \$435,000,000,000 (both reckoned in terms of the prices of the base year 1909) and have altered the price level from 107.7, as originally calculated, to 107.6 (on the basis of the base year 1909 as 100 per cent).

The results thus corrected and expressed in *billions* of dollars, are as follows:

$$\begin{array}{c} \text{Circ. of money (36)} \\ \text{Money} \times \text{its veloc.} \\ 1.76 \times 21 \end{array} \left. \begin{array}{c} \text{Circ. of checks (432)} \\ \text{Deposits} \times \text{their veloc.} \\ 8.15 \times 53 \end{array} \right\} + \left. \begin{array}{c} \text{Value of goods bought} \\ (468) \\ \text{Trade} \times \text{Scale of} \\ \text{prices} \\ 435 \times 107.6 \text{ per cent} \end{array} \right\}$$

Comparing these figures with those calculated for 1911, we find that the money in circulation has increased 3.7 per cent; the deposits subject to check, 4.8 per cent; their "activity" or velocity of circulation, 6.2 per cent; the volume of trade, 5.3 per cent; and the level of prices, also 5.3 per cent.

These results and other statistics confirm in almost every respect the prophecy ventured in last year's article:

The outlook for the next year or two in the United States would appear to be for a reduction of gold imports, a slackening in the growth of bank reserves and deposits; and an increase of money in circulation, both absolutely and *relatively to deposits*. The activity of deposits seems likely to remain excessive and the volume of trade to increase slightly. The net result will probably be a slight rise in prices.

The only substantial departure of the facts from this forecast is in respect to the italicized statement. Money in circulation increased 1 per cent less rapidly than deposits.

The course of events in the year 1913 will depend largely on the date as well as the character and extent of the expected tariff revision. If this revision is prompt and thoroughgoing it should have the effect of checking the present inflationistic tendency, encouraging the import of goods and the export of gold. Quite irrespective of the merits of tariff revision, this arrest of inflation should prove an antidote to the impending overstimulation of business and postpone the crisis

in which such undue expansion generally culminates. It seems unlikely that the revision could be so great or its effect so drastic as to itself precipitate a crisis. It would not, however, be surprising if in other countries such as Canada, Germany, and Japan where there is, apparently, no prospect of such an arrest of inflation, a crisis should soon materialize, perhaps within the next year or two.

I shall not take space here to attempt a justification of these guesses as to the future.

IRVING FISHER.

A CREDIT UNION IN MASSACHUSETTS. In 1909 the Commonwealth of Massachusetts passed an act (chapter 419) authorizing the establishment of credit unions, which are defined by the act as "coöperative associations formed for the purpose of promoting thrift among their members." This very comprehensive act is the first law enacted in the United States authorizing the establishment of associations along the lines of those which have proved so successful in other countries. The act contemplated the formation of coöperative credit unions modelled essentially on the plan of the Raiffeisen and Schultze-Delitzsch banks of Germany.

A concrete example of such an association is the Myrick Credit Union formed in 1910 by the employees of the Phelps Publishing Company of Springfield, Massachusetts. This has a membership of about one hundred. The operations as yet are on a small scale. The total business for the year 1912 was \$7,319, and the deposits amounted to \$1,419. The union purposes the extension of its field of operations to include the employees of the Phelps Company in New York, Chicago, Aberdeen, S. D., and other cities where they have branch offices.

In general, the object of the credit union is to encourage members to save their earnings. Specifically, the chief objects of the association, as set forth in the constitution, are "to protect its members against reverses of fortune . . . to aid them by a wise and provident system of credit in the shape of loans and advances . . . to secure the practice of virtues that mark the good citizen . . . to combat usury . . . to spread amongst its members a practical knowledge of the elementary principles of economic science . . . to teach them respect for their engagements . . . to gradually procure their . . . economic independence."

The capital of the association is variable in amount and consists of 687 shares of the value of \$2.00 each, which sum may be paid down or

by ten-cent weekly instalments. An entrance fee, fixed by the board of directors, is charged upon each share. This amount, now 10 cents per share, in addition to twenty per cent of the net profits of the year, forms a guaranty fund. This with the capital represented by the shares subscribed, the provident fund, and the resources secured by the loans, constitute the funds of the association. The provident fund, consisting of ten per cent of the profits of the year, is maintained "to cover the first extraordinary losses of the year, resulting from the operation of the association and for other purposes." This may be discontinued when it reaches an amount equal to one half the maximum capital.

The qualifications for membership in the union are honesty, punctuality in payment of debts, sobriety, good habits, and industry. Of those borrowing from the funds of the union, certain other things are required, such as good standing in the association with no unpaid loans. Each member must hold at least one share in the union, but no member may hold more than a maximum number, which is fixed by the general meeting of the organization. At present this is 125 shares, representing an investment of \$250. This amount greatly exceeds the number of shares held by the average member. Besides the amount received from the purchase of shares, the union also receives from the members deposits limited to \$250 per shareholder.

During the early history of this union, the amount of the loans was limited to \$250, for a period of one year, at 7 per cent subject to renewal for another year. No security was asked, the loan being made on the mere signing of a note. Recently, however, the maximum amount of a loan was reduced to \$50 for three months, renewable for another three months. Security has also been required, usually an assignment of wages or insurance. It is probable that the amount obtainable by loan will be again raised, but it is not expected that it will exceed one hundred dollars for one year. There has been for some time past a sliding rate of interest with a minimum charge of fifty cents, which is regarded as unfairly high, and the credit committee is looking to the establishment of a lower rate of interest. Each borrower must state in his application the purpose for which he asks the loan, and this must then be passed upon by the credit committee, which is bound by the constitution to give the preference to small loans, provided the security for repayment is equally good.

While only about twenty per cent of the employees of the Phelps Publishing Company have thus far availed themselves of the benefits of the credit union, at least seventy-five per cent of the share-

holders have become borrowers or depositors. The shareholders who constitute the credit and supervisory committees are prohibited by the constitution from becoming borrowers from the funds of the union.

The organization of the union conforms exactly to the Massachusetts act of 1909. In addition to the usual officers, the conduct of the association is in the hands of three committees: a board of seven directors elected for two years, a supervisory committee and a credit committee, of three members each; the supervisory committee being elected for one year, and the credit committee for two years. The board of directors is given the most extensive powers. This body may refuse admission to applicants for membership, pronounce upon expulsion of members, determine expenses of management, adopt by-laws relating to organization, propose dividends to be paid, and determine the manner in which money of the union shall be invested. The credit committee, as stated above, decides upon all loans. The supervisory committee is general guardian of the funds and operations of the organization.

Dividends are paid after the expenses of operation, twenty per cent for the guaranty fund and ten per cent for the provident fund, are deducted from the year's profits. But dividends may amount to but six per cent till the guaranty, provident, and other funds are complete.

ALEXANDER E. CANCE.

Massachusetts Agricultural College.

THE INTERNATIONAL CONFERENCE ON BILLS AND CHECKS. The second International Conference on Bills of Exchange was held at The Hague, beginning on June 15th last, and closing on July 23rd. The conference bore fruit in the adoption of a complete draft of a uniform law on bills of exchange, which was signed by the leading Continental powers, and will probably be adopted by them within the next two or three years, as soon as legislative machinery can be set in motion. The delegate of the United States, Mr. Charles A. Conant, and the delegates of Great Britain, did not sign the protocol, because of the wide difference in the bases of Anglo-American and Continental law and because some thirty-eight of the American states and most parts of the British Empire had already adopted a substantially uniform negotiable instruments law. The presence of the delegates of the Anglo-American powers, however, tended to secure many modifications in the draft of the uniform law in the direction of simplicity and flexibility. Among the cases in which the Anglo-American rule

prevailed were the option given to contracting states to discard the specific designation of a bill of exchange as such in order to give it validity; the right of a drawer of a bill to draw upon himself; the recognition of presentment for payment through a clearing house; the right of the drawer to stipulate for indefinite extension of the time for acceptance of a bill payable at a fixed time after sight; and the extension of the rule of *force majeure* to cases not purely personal.

The conference also adopted some resolutions on the check, intended as the groundwork of a uniform law, but so much time was spent in perfecting the law of bills that the resolutions did not assume the form of a complete project of law. Among the provisions of the check resolutions was the adoption of the English system of the crossed check. Another conference will be called by the government of The Netherlands within the next two years to compare views in regard to the check and complete a draft of a uniform law on the subject.

Parts 7 to 17 of the *Money Trust Investigation*, by the subcommittee of the Committee on Banking and Currency, have been printed (1913, pp. 505-1266). These cover the hearings between Dec. 9 and Jan. 6. Mr. Morgan's testimony may be found in parts 14 and 15. Part 16 contains documentary material and statistics in regard to clearing houses, dealings in various stocks, 1906-1912, with diagrams and relationship of certain New York banks with their correspondent banks.

Part II of Bulletin No. 106 of the United States Bureau of Labor, entitled *Retail Prices 1890 to June, 1912* (Aug. 28, 1912, pp. 205), contains the general tables showing the actual prices of the principal articles of food, and of coal, upon which the summary in part I was based.

Bulletin No. 108 deals with *Retail Prices, 1890 to August, 1912* (Oct. 1, 1912, pp. 154). (See REVIEW, vol. II, p. 969.)

In the *Report of the Secretary of Agriculture, 1912* (Washington, pp. 279), there is a brief and condensed summary of the results of a recent inquiry in regard to the need of further agencies of rural credit. The investigation was made through a questionnaire sent to 9000 correspondents.

On this same subject is to be noted *Preliminary Report on Land and Agricultural Credit in Europe*, which includes the letter of President Taft to the governors of states, and the recommendations of Ambassador Herrick (Washington, pp. 38).

The Wisconsin State Board of Public Affairs has recently taken up the subject of coöperation, both in production and in credit. Two pamphlets are the result: *Report upon Coöperation and Markets; Part I, Agricultural Coöperation* (pp. 132); *Part II, Coöperative Credit* (pp. 27). Mr. John F. Sinclair is responsible for the preparation of each of these. The first part contains a bibliography of eleven pages, and the second part, two pages.

The National Federation of Remedial Loan Associations has begun the publication of a *Bulletin*. The first number, for June, 1912, contains the proceedings of the annual convention held at Cleveland June 13-14, 1912 (pp. 46). Another leaflet shows the *Work of the Remedial Loan Societies 1911-1912* (Secretary, 914 G. St. N. W., Washington, D. C.).

The effort to find an explanation for the rise in retail prices is responsible for *A Study of Trolley Light Freight Service and Philadelphia Markets in their Bearing on the Cost of Farm Produce*, by Dr. Clyde L. King, of the Wharton School of Finance, Philadelphia. A table shows for certain farm products the price at the farm and at Philadelphia, and the successive increments added by transportation and handling by the jobber, wholesaler, and retailer; for example, the farmer got 63 cents for a bushel of potatoes; freight to the terminal added 9 cents; the jobber got 8 cents, the wholesaler, 10 cents, and the retailer, 40 cents, making the consumer's price \$1.30. The report contributes new data to the subject of markets, and throws light upon the Pennsylvania system of taxing mercantile sales. Copies of the report may be had upon application to the Department of Public Works, City Hall, Philadelphia.

Mr. John Harsen Rhoades (45 Wall St., New York) delivered an address before the Finance Forum of New York City, December 18, 1912, on *Who Shall Control our Financial Destiny* (pp. 8). Mr. Rhoades favors the Aldrich plan, but suggests that the Board of Management be reduced from 45 to 14, and that the members be appointed by the President instead of being elected by bankers or any special interest.

Laws Relating to State Banks, Trust Companies, and Savings Institutions in Force in the State of Maryland have been compiled in a separate pamphlet (Bank Commissioner, 510 Union Trust Bldg., Baltimore, 1912, pp. 40).

Public Finance

THE VOTE ON THE SINGLE TAX IN MISSOURI. In the general election of November, 1912, the voters of Missouri rejected a proposed amendment to the state constitution embodying the principles of the single tax. The amendment was proposed by initiative petition, a method which was made possible by a constitutional amendment concerning the initiative and referendum adopted in 1908. In Missouri, as in other states, the single tax forces have been prominently identified with the movement for securing the initiative and referendum.

The proposed single tax amendment provided for the immediate exemption from taxation of bonds issued by the state or its local units, and for the abandonment in 1914 of taxes on all other forms of personal property, tangible and intangible, together with poll taxes and business licenses (except those imposed under the police power). In the case of real property, land was differentiated from improvements. The latter, to the extent of \$3,000 on each homestead, were to be exempt in 1914; the remainder was to be taxed on three fourths the assessed value in 1914 and 1915; on one half in 1916 and 1917; on one fourth in 1918 and 1919, and thereafter was to be totally exempt. Beginning with 1920, therefore, land (with public utility franchises, which were put in the same category) would have remained as the sole object of taxation, except for an important proviso that the amendment should not be construed "as limiting or denying the power of the State to tax any form of franchise, privilege, or inheritance." The present rigid restrictions on the tax rate were to be repealed, and a separate amendment provided for a permanent tax commission of three members, appointed by the governor, which, in addition to other duties, was to assume those of the present *ex-officio State Board of Equalization*.

The campaign for the amendment was elaborately organized. The major portion of the necessary funds was supplied, it is understood, by Mr. Joseph Fels, through the Fels Fund Commission. Speakers for the single tax were sent throughout the state, and single tax literature was thoroughly distributed. Of the two principle lines of single tax argument—first, that industry would be stimulated by the removal of the "tax on industry," with its repressive effects; and, second, that private appropriation of the "unearned increment" is unjust—the first was stressed more heavily than the second. This was in line with a general attempt to win votes on the basis of alleged personal advantage to the taxpayer.

Not only were Missouri industries to gain rapidly over competing

industries in other states, still handicapped by the general property tax, but this industrial prosperity, it was said, was to redound to the advantage of landowners (especially urban landowners) through the increase of population and wealth and the resulting rise of land values. Whatever amount increased taxation might take from land values would in this way be more than restored. It is obviously hard to reconcile this position, taken as it was by official spokesmen of the propaganda, with the general tenets of single tax theory relative to the ethics of the "unearned increment."

But an argument even more directly *ad hominem* was used. In St. Louis, for example, detailed estimates were sent to owners of improved property, showing that the total tax bill of each recipient would be reduced if the proposed changes in the tax system were made. In cases where taxes would have been increased, the information was not sent out, but was kept on file and open to inspection at the single tax headquarters. Similar estimates were made for selected agricultural townships, showing that in most cases the increase in the farmer's tax bill would not be large, and that in many individual cases, as where the land was of low value or the farm highly improved, there would be a reduction.

It was expected that the agricultural vote would be adverse to the amendment, but every effort was made to gain rural votes, in the hope that a possible favorable majority in the cities might suffice to carry the state. As it was, the farmers in many sections became thoroughly aroused against the measure, and in such sections debates and other public discussions were more frequent, it is said, than at any time since the free silver campaign of 1896. Much of this discussion, however, centered around Henry George's exposition of the single tax and his own thoroughgoing proposals. It is impossible to say whether this was on account of a general failure to grasp the relatively limited nature of the changes actually proposed in the amendment, or because of a fear that these changes were intended as an entering wedge for the program of the complete government appropriation of land rent. The advocates of the amendment protested that their proposals should be entirely disassociated from Henry George's doctrines. In a widely distributed leaflet written by Dr. William Preston Hill, the president of the local single tax organization, it was said: "Is it not absurd to try to prove the intentions of living men by quoting the works of a dead author? What has Henry George to do with this amendment?"

There is reason, however, for suspecting that the attitude of the

opposition was not altogether illogical. In a circular letter issued on January 4, 1913, by the Fels Fund Commission, it is explained that the large majority against the amendment cannot be regarded as discouraging, for the measure, "however partial," was "recognized and opposed as the single tax." "Since this was so," the letter adds, "one-third of the voters in St. Louis are single taxers, ready for the whole Henry George philosophy." When this avowal is weighed and the fact that little was said during the campaign about the "uncarved increment" (in the cities, at least) is also taken into account, it becomes fairly apparent that the campaign for the amendment had some disingenuous features.

Several associations were organized by opponents of the single tax, this organized opposition centering largely in Kansas City. It is unfortunate that much of the active work against the proposed changes was done by men who were willing to defend the worst features of Missouri's present system of taxation, and who were willing to appeal to the crudest prejudices in order to gain votes. Many men who had worked in the past for tax reforms along scientific lines, disheartened by successive failures and yet desiring to protest against present conditions, either gave the new movement a qualified support or refrained from active opposition.

The Democratic and Republican state conventions declared against the amendment, but it received the endorsement of the State Federation of Labor, which in each of the two years immediately previous had declared for the single tax. In St. Louis the labor organizations and the single tax group have coöperated in various ways during the last few years.

The amendment providing for a permanent state tax commission was defeated by a majority nearly as large as that against the single tax. The opponents of the tax took no account of the fact that the proposed commission was precisely of the type now found in many states. They insisted that the proposal for a commission concealed some sinister method of advancing the cause of the single tax. The truth seems to be merely that the friends of the single tax wisely desired that if it were adopted it should be inaugurated under conditions that would favor its efficient administration.

The single tax amendment received in the state 87,000 votes, or fourteen and a half per cent of a total vote of 595,000. A large part of the favorable vote came from the cities. In the counties containing the cities of St. Louis, Kansas City, St. Joseph, and Springfield, thirty-seven per cent of the voters were in favor of the amend-

ment. In the remaining counties of the state the single tax polled only 22,000 in a total of 424,000 votes, or only a little over five per cent. In the city of St. Louis it received forty-two per cent of the vote. It is not surprising that the single tax advocates are now turning their energies toward securing the separation of state and local revenues.

A. A. YOUNG.

INVESTIGATION OF RAILROAD TAXATION IN MINNESOTA. For several years it has been the general opinion in Minnesota that a four per cent tax on the gross earnings of railroads is inadequate. As a result there has been some sentiment, though probably not a great deal, favorable to the ad valorem system. The Minnesota Tax Commission, however, in the report of 1908 and again in 1910, recommended the retention of the gross earnings tax at an advanced rate. In preparation for the report of 1912, the commission created a Department of Research and Statistics, with Professor E. V. Robinson of the University of Minnesota as director, and gave instructions for a more thorough and detailed study of the methods and results of railroad taxation than had previously been made in the state. The report of the new department on this subject forms chapter 14 in the report of the commission for 1912.

After a preliminary survey of theories of taxation in general, the several methods of railroad taxation used in this country are examined, special attention being given to the state board ad valorem system in Michigan and Wisconsin, and to the tax on gross earnings. The conclusion is that ad valorem taxation of railroads is merely an indirect, uncertain, and cumbersome method of taxing earnings. Gross earnings, which are sharply distinguished from gross receipts, are consequently found to be the most logical and most satisfactory basis for the taxation of railroads.

In order to ascertain approximately what the rate of tax on gross earnings ought to be, the true valuation in the state is found by the use of the sales method for real estate, and by comparison of the signed agreements of assessors in the several counties, for personal property. The valuations of the railroads are next calculated on the basis of the commercial valuation in 1904, the claims of all the roads in 1906, the physical valuation by the state in 1907, the claims of several roads in 1908, the value allowed by the district court in 1908 for rate-making purposes, and the claim advanced at the time by the several railroads. All of these valuations are also carried down to 1912 by the ratio plan. The conclusion reached is that a tax of five

per cent on the gross earnings would be warranted on most of the bases named; while if the valuation established by the court for rate-making purposes should be adopted, a tax of six per cent would not be excessive.

After inspection of these figures, the commission issued a statement late in October summarizing the main conclusions; and at the election in November the people by a large majority ratified an amendment advancing the tax on gross earnings to five per cent.

Part IV of *Taxation of Corporations* has been issued by the Commissioner of Corporations (Washington, Nov. 29, 1912, pp. xiii, 144). This is devoted to taxation in the western central states, covering Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Kansas and Missouri. Minnesota is the only state in this group which relies largely on corporation taxes. Special study is made of the taxation of intangible personal property at a low uniform rate, in which a review is made of the methods pursued in the East as well as in the West.

The *Fourth Annual Report on the Statistics of Municipal Finances of Massachusetts for the fiscal year 1909-1910* has recently appeared under the editorial supervision of Charles F. Gettemy, director of the Bureau of Statistics (Boston, 1912, pp. xlvi, 302). Of especial interest is the account of the operations of the new act relating to certification of town notes. It is announced that the report of the special investigation relative to sinking funds and serial loans is nearly ready.

The *Report of the Tax Commissioner of Connecticut for 1911 and 1912* contains an account of the new personal tax law (pp. 10-13), and gives special attention to the work of tax officials, including the assessors and collectors. A considerable space is also given to the succession and inheritance tax laws, and on page 198 will be found a table showing the receipts from inheritance taxes of all the states which had such laws in force in 1912 (Hartford, 1912, pp. 209).

In a *Report in the Matter of the Investigation of the Accounts of the Municipal Ferries of New York*, prepared by the Commissioners of Accounts, there is a financial analysis of what is stated to be New York's first comprehensive experiment in municipal ownership. The city took over in 1905 the Staten Island ferry, which had previously been a losing enterprise. From this and other municipal ferries there has been a continuous financial loss (280 Broadway, New York, 1912).

The Manufacturer's Appraisal Company, of Cleveland, began in October the publication of a quarterly, the "Somer's System News," designed to advance the business of this company in assisting cities in making tax assessments and valuations of property for industrial purposes. The first issue contains 24 pages. Of interest is the article on "Central Boston Assessments," analyzed by Somer's mathematical computations.

Insurance

The Bulletin of the Industrial Commission of Wisconsin, Vol. I, No. 6, Dec. 20, 1912, is devoted to a discussion of *Liability Insurance Rates* (pp. 289-300). Reference is made to the rates offered by old-time companies in different states where compensation laws have been put in operation.

The REVIEW has received *American Public Pension Systems and Civil Service Retirement Plans*, by Frederick L. Hoffman (Prudential Insurance Co., Newark, N. J., pp. 46), in which there is a comprehensive survey of different pension plans and actuarial principles—military, civil, old-age, etc.—which have been in operation in this country.

The address of William T. Emmet, Superintendent of Insurance of New York, on *The Attitude of Present Day Insurance Supervision*, recently delivered before the Association of Life Insurance Presidents, has been printed in pamphlet form (Albany, Dec., 1912, pp. 10).

The text of the *British National Insurance Act, 1911*, is reprinted in Bulletin 102 of the United States Bureau of Labor (July 15, 1912, pp. 87); and that of the *Sickness and Accident Insurance Law of Switzerland*, in Bulletin 103 (Aug. 1, 1912, pp. 27).

The American Telephone and Telegraph Company has issued, under date of January 1, 1913, a pamphlet describing its *Plan for Employees' Pensions, Disability, Benefits, and Insurance* (pp. 14). This plan applies to the employees of allied companies, as the Western Union Telegraph Company.

During the past year the "New York Journal of Commerce" has published a series of brief articles on pension plans of different corporations, railroads, and industrial plants. These have appeared as follows:

Western Union Telegraph Co.	June 12
United States Steel Corporation	June 19
Union and Southern Pacific Railroads	June 26

Wells Fargo Express Co.	July 3
American Express Co.	July 10
National Lead Co.	July 17
American Sugar Refining Co.	July 24
Old Dominion Steamship Co.	Aug. 7
International Harvester Co.	Aug. 14
Consolidated Gas Co. of New York	Aug. 21
Western Electric Co.	Oct. 23
New York Central Railroad Co.	Nov. 6
American Telegraph & Telephone Co.	Nov. 11
Pennsylvania Railroad	Nov. 13
Rock Island Lines	Nov. 20
Armour & Co.	Nov. 25
Atchison, Topeka & Santa Fe Ry.	Nov. 27
Deere & Co.	Dec. 4
Du Pont Powder Co.	Dec. 11
Gorham Mfg. Co.	Dec. 18
National City Bank	Dec. 20
Delaware, Lackawanna & Western R.R.	Dec. 25

Demography

Mortality Statistics 1909, published by the Bureau of the Census, is the tenth annual report on vital statistics compiled under federal authority. Use is made of the census of 1910 to revise the rates for intercensal years 1901-1909. (Washington, 1912, pp. 810.)

Professor Fisher's paper on "A Revised Estimate of the Economic Cost of Tuberculosis" has been reprinted from the *Transactions of the Eighth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis* (pp. 19).

The recent congress of demography has undoubtedly stimulated interest in the subject of vital statistics. Two recent pamphlets in particular may be noted: *The Influence of Vital Statistics on Longevity*, by Dr. Watson S. Rankin, secretary of the North Carolina Board of Health (Raleigh); and *A Report on Vital Statistics, and Health Reports of New York City*, by a committee of the New York Academy of Medicine. This was originally printed in the "Medical Record" of November 23, 1912.

Care of Tuberculosis Wage-Earners in Germany, by Frederick L. Hoffman, is the title of Bulletin 101 of the federal Bureau of Labor (Washington, July 1, 1912, pp. 183). This is an exhaustive study covering mortality, sanitorium treatment, cost of treatment under different systems, with particular reference to invalidity insurance institutions.

The State Department of Health of Maryland has issued a pamphlet on the *Report of Industrial Diseases* (6 East Franklin St., Baltimore, 1912), in which the purpose of the new law of 1912 is explained.

Statistics

Students of statistics will be glad to note that after an interval of two years the publication of the *Annali di Statistica*, the valuable Italian government publication devoted to statistical analysis, has been resumed. The first number of the new series (the fifth) is a monograph by G. Montemartini, entitled *Le Curve Tecniche di Occupazione Industriale*. The author deals at considerable length with the general theory of employment statistics, with special reference to the economic and social purposes which such statistics may serve. Statistics drawn from a wide range of sources are exhibited in tables and diagrams showing the variations in employment in industries of various sorts by months. Two statistical coefficients are thought by Montemartini to be especially significant: the first being the ratio of the minimum number employed in any month of the year to the maximum number, and the second being the ratio of the number constantly employed during the year (twelve times the minimum employment) to the total employment (the sum of the numbers employed in each of the twelve months). The second ratio is made the criterion of a classification of industries into three types. Special emphasis is put upon the practical problems and the possible avenues for governmental action growing out of the coincidence or lack of coincidence in different industries of the variations in the amount of employment of unskilled labor.

A. A. Y.

A monograph by Professor C. Ottolenghi of the University of Camerino, entitled *La Determinazione dei Valori Unitari Medi d'Importazione e d'Esportazione nella Statistica Commerciale* (Turin: S. Lattes & C., 1912) presents the results of an investigation undertaken by the author at the behest of the Italian Ministry of Agriculture, Industry, and Commerce. In the valuation of exports and imports for statistical purposes Italy uses the method of appraisal by an official board rather than of declaration by exporter and importer. These appraisals are not made separately for individual shipments, but are obtained by multiplying the amount of goods exported and imported, classified in over 1400 categories, by the estimated yearly average price per unit of each class of goods. Errors are introduced by reason of both the inadequacy of available price statistics and

the grouping of different grades of goods in one class. Professor Ottolenghi submits a detailed plan for the elimination of both of these sources of error. If his recommendations are adopted better price statistics as well as better trade statistics will be available for Italy.

A. A. Y.

STATISTICAL REFORM IN CANADA. In May, 1912, a departmental commission was appointed to enquire into the statistics of Canada, and to recommend a policy of coördination and re-organization looking to their extension and improvement. Provincial as well as Dominion statistics were included in the scope of the inquiry. The commission consisted of Mr. Richard Grigg, Commissioner of Commerce; Professor Adam Shortt, Civil Service Commissioner; Mr. E. H. Godfrey, Census and Statistics Branch; Mr. W. A. Warne, Statistical Branch, Trade and Commerce; Mr. R. H. Coats, editor of "The Labour Gazette," Department of Labour, and Mr. John R. K. Bristol, Department of Customs. It sat at intervals during the summer and autumn months, and the report was made public in January. (Ministry of Trade and Commerce, Ottawa, 1913, pp. 75.)

In conducting its investigation, the commission proceeded according to subject-matter rather than by departmental organization, and the report is framed on that basis. For the sake of coherence and condensation the usual verbatim statement of evidence is omitted, and the facts thereof presented in a digest which follows the same arrangement as the report proper. The reader may thus turn from the general observations and findings of the commission on any point to a succinct and readable presentation of the main facts on which they are based. As a frontispiece to the report appears a diagram which embodies the commission's conception of the extent and organization of the general field of statistics.

The general finding of the commission is that though many of the statistical reports of the various branches and departments are of undoubted excellence, Canadian statistics as a whole show a lack of coördination and common purpose. Though the British North America Act of 1867 gave the Dominion government specific authority to deal with "Statistics" (a provision which is interpreted by the commission as by no means precluding statistical activity on the part of other governmental bodies), there has been, nevertheless, a conspicuous lack of appreciation of the fact that the statistics of a country, whether the product of one agency or of several agencies, should constitute a single harmonious system. The statistics of Canada are found, accordingly, in some cases to be restricted in scope, to vary

in quality and value, and to involve numerous duplications both as between the Dominion and the Provinces, and as between departments of the same government. To remedy this general situation the commission proposes the creation of a central statistical office under the Dominion government, with the duty of enlarging and coördinating in the first instance the statistics issued on federal authority, and of laboring to secure the coöperation of the Provinces in a correlated treatment of the whole field. The office, in effect, is to be a "thinking" office on the subject of statistics for the whole Dominion. It is not to override or encroach upon purely departmental authority, it being laid down as a principle that "statistics should in every case be collected and analyzed by those who have a full and expert knowledge of the phenomena they illustrate." To assist in the work of centralization, two sets of machinery are suggested: first, an interdepartmental committee consisting of delegates from the various departments which issue statistics; and, second, an interprovincial conference in which the various departments of the several Provinces shall combine with the Dominion departments in the discussion of statistical ways and means.

Turning to more specific topics, the report contains a number of suggestive criticisms and recommendations. The enumeration of population and property, it is thought, is the first duty of the census. A quinquennial census of these is advised. On the subject of production, the institution of an annual census of agricultural, fishing, lumbering, and mining outputs is recommended, the annual statistics of the Commonwealth of Massachusetts being put forward as a model in the case of manufacture, the statistics of agricultural, forestry, fisheries and mines products to depend on more or less elaborate schemes involving interprovincial coöperation. The discrepancies and omissions which have characterized the vital statistics collected by the several provinces in the past are severely censured. The creation of statistics of emigration, and the better coördination of municipal statistics are urged.

Under the heading Trade and Commerce, the chief recommendations are for a better classification scheme (though Canada already classifies her imports and exports more elaborately than any other country) and for better coördination between the statistical branches of the Department of Customs and of the Department of Trade and Commerce. Under the heading Interprovincial Trade, on which important subject no statistics exist, the commission reviews the possibilities of the situation and recommends an experiment in the case of

the more important articles of production and consumption, the list to be enlarged as experience may dictate. The lack of comprehensive periodical reports on wages and household expenditures is pointed out. Other subjects definitely touched upon include industrial accidents, tariff statistics, and publications. A final recommendation is that the appointment of all officials engaged in statistical work should be on grounds of character and capacity alone, under a plan to be reported by the Civil Service Commission.

PERIODICALS

The REVIEW is indebted to Robert E. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Economic History, United States

(Abstracts by E. L. Bogart)

ARBUTHNUT, C. C. *An economic interpretation of present politics.* Pop. Sci. Mo., Aug., 1912.

The American people, as a result of their rich environment, developed a code of ethics of exploitation. This was satisfactory as long as the favors to be distributed—land grants, protection, etc.—were generally shared. But now the national wealth has been so largely appropriated, the majority is insisting the minority shall cease their former practices.

LIPPINCOTT, I. *Industrial influence of lead in Missouri.* Journ. Pol. Econ., July, 1912.

Lead undoubtedly did much to promote the early exploitation and settlement of Missouri but its effect upon more recent commerce and manufactures seems overemphasized.

LIPPINCOTT, I. *The early salt trade of the Ohio valley.* Journ. Pol. Econ., Dec., 1912.

The importance of salt to the early settlers and efforts made by federal and state governments to reserve and develop sources of supply. Growth and decline of the production of and trade in salt in the Ohio Valley between 1800 and 1860. The subject is carefully traced down to 1880.

ROSS, E. A. *The middle west.* Century, Feb., 1912.

The first of a series of "studies of its people in comparison with those of the East." It deals with "the fiber of the people," which is found to be as strong and vigorous in the West as it is dried up or decayed in the East.

Economic History, Foreign

(Abstracts by Clive Day)

ALAZARD, J. *Les causes de l'insurrection lyonnaise de Nov. 1831.* Rev. Hist., Sept., 1912. Pp. 34.

Description and analysis of the wretched condition of workers in the silk industry.

AUBIN, G. *Der Einfluss der Rezeption des römischen Rechtes auf den deutschen Bauernstand.* Jahrb. f. Nat. Oek., Dec., 1912. Pp. 23.

In agreement with Von Below, that the Roman law was not a positive depressing influence.

VON BRAKEL, S. *Neuere Literatur über den Ursprung der Aktiengesellschaften.* Vierteljahrsschr. f. Soz. u. Wirtschaftsgesch., X, 4, 1912. Pp. 15.

Review of five recent publications (including W. R. Scott) by the author of an important monograph in this field.

BOISSONNADE, P. *Les études relatives à l'histoire économique de l'Espagne et leurs résultats.* Rev. de Synthèse Hist., June, Aug., 1912. Pp. 15, 10.

Bibliographical survey, covering a considerable number of recent and older publications on Spain from 711 to 1453, the articles being devoted respectively to industry and to commerce.

BONOLIS, G. *Il diritto marittimo medievale dell'Adriatico.* Riv. Internazionale, Oct., 1912. Pp. 22.

Roman and Byzantine influences upon the statutes governing mediaeval Adriatic commerce.

CATERING, S. *Di alcuni prezzi di derrate e di stoffe nel secolo XVI in Roma.* Giorn. d. Econ., Apr.-May, 1912. Pp. 5.

Food was cheap, clothing expensive, in the Rome of the sixteenth century.

COORNAERT, E. *La décadence de l'économie urbaine et les petits métiers.* Vierteljahrsschr. f. Soz. u. Wirtschaftsgesch., X, 4, 1912. Pp. 16.

Changes in the views and policy of city craftsmen, in the transition to freedom of industry, illustrated from the archives of Bergues, 1573.

DELAVAUD, L. *Un projet d'établissement commercial français à Arkhangel (1664-1672).* Rev. Sci. Polit., Nov., 1912. Pp. 19.

DI NOLA, C. *La crisi cottoniera e l'industria del cotone in Italia.* Giorn. d. Econ., Apr.-May, June, 1912. Pp. 30, 53.

The first instalment covers the period to 1900 when the cotton industry was becoming established in Italy; the second, the period from 1900 to 1910 with emphasis upon the circumstances leading to the crisis in the industry in 1907.

EHLER, J. *Stadtverfassung und Zünfte Freiburgs im Breisgau.* Jahrb. f. Nat. Oek., Dec., 1912. Pp. 27.

FISTY, O. *Dix années de l'histoire corporative des ouvriers tailleurs d'habits (1830-1840).* Rev. d'Hist. Doct. Econ., Nos. 2-3, 1912. Pp. 34.

A careful study, based on archival material and contemporary newspapers, and furnishing for France a companion-piece to Galton's book on the English tailors.

FRANK, T. *Mercantilism and Rome's foreign policy.* Am. Hist. Rev., Jan., 1913. Pp. 20.

An excellent critical study, showing the slight importance of foreign commerce and the slight influence of commerce on policy, during the Republic.

FREMY, E. *Conditions des ouvriers au XVII et au XVIII siècle dans l'industrie des glaces.* Rev. d. Etudes Hist., May, 1912. Pp. 17.

Study of conditions in a protected industry.

GIRARD, A. *Une négociation commerciale entre la France et l'Espagne en 1782.* Rev. Hist., Nov., 1912. Pp. 25.

GRAS, N. S. B. *The origin of the national customs-revenue of England.* Quart. Journ. Econ., Nov., 1912. Pp. 43.
 A careful essay in classification, distinguishing local, semi-national, and national customs.

GUYOT, Y. *La question d'Orient et les conflits économiques.* Journ. des Econ., Nov. 15, 1912. Pp. 21.
 A rapid survey of recent history, with the author's conclusions on the contemporary situation.

HOMAN, B. *Die erste staatliche direkte Steuer.* Ungarische Rundschau, Jan., 1912. Pp. 20.
 A study covering the countries of both western and central Europe in the period before such war taxes as the Danegeld.

KIERSELBACH, G. A. *Die Entstehung der deutschen Städtehanse.* Hist. Vierteljahrssch., July, 1912. Pp. 32.
 Defending his view, that the Hansa arose from the union of cities to further their foreign trade, against Stein. Another attack on Stein's view (of an origin in the personal association of merchants abroad) appeared in May, by K. Schaubé.

KINKEL, J. *Die altrussische Volkswirtschaft.* Vierteljareschr. f. Soz. u. Wirtschaftsgesch., X, 1, 3, 1912. Pp. 17, 56.
 A valuable study of the Russian economic organization from the sixth to the fourteenth centuries, based on early Russian literary and legal sources.

LAPTSCHEWITSCH, D. and TOPALOVITS, Z. *Die Entwicklung der sozialdemokratischen Bewegung in Serbien.* Archiv f. Geschichte Sozial., III, 2, 1912. Pp. 16.

LANDEMANN, H. *Restif de la Bretonne.* Archiv f. Geschichte Sozial., III, 2, 1912. Pp. 51.
 Summary and appreciation of Restif's proposals for the reorganization of French society about 1800.

MAYER, T. *Zur Frage des Wiener Stadtrechtes.* Vierteljareschr. f. Soz. u. Wirtschaftsgesch., X, 3, 1912. Pp. 28.
 Narrative and critical study, covering the last centuries of the Middle Ages.

SCELLE, G. *Théories relatives à l'esclavage en Espagne au XVII^e siècle.* Rev. d'Hist. Doct. Econ., Nos. 2-3, 1912. Pp. 28.
 Analysis of official pronouncements and of doctrinal writings of churchmen relative to American slavery and the African slave trade, in which economic considerations take but a small place.

SCHMIDT, C. *Une enquête sur la draperie à Sedan en 1803.* Rev. d'Hist. Doct. Econ., Nos. 2-3, 1912. Pp. 17.
 Interesting particularly for the vivid picture that it gives of the organization and strikes of shearers, frauds of spinners and manufacturers, and the introduction of English machinery.

VAN HOUTTE, H. *La législation cannoise des Pays-Bas à la fin de l'Ancien Régime et la disette de 1789 en France.* Vierteljareschr. f. Soz. u. Wirtschaftsgesch., X, 1, 1912.

WALTHER, A. *Geldwerth in der Geschichte*. Vierteljahrsschr. f. Soz. u. Wirtschaftsgesch., X, 1, 1912.

An interesting methodological program, developing the principles of the scientific comparison of purchasing power in different periods.

Economic Geography

(Abstracts by E. V. D. Robinson)

ECKEL, E. C. *American iron-ore reserves*. III. Engg. Mag., Oct., 1912.

Three possible logical methods of valuation are: (1) capitalization of smelting profits; (2) capitalization of royalties; (3) market or replacement value. First method is used in case of all metals except iron. In that, the profits are mostly credited to later operations.

ECKEL, E. C. *Iron-ore reserves and limitations of ownership*. Engg. Mag., Aug., 1912.

No corporation controls over 25 per cent of the ores now commercially available. Monopoly is impracticable.

FLETCHER, R. *United States irrigation work in the northwest*. Engg. News, Nov. 14, 1912.

Largely from engineering viewpoint, but with some reference to economic conditions.

HESS, R. H. *The beginnings of irrigation in the United States*. Journ. Pol. Econ., Oct., 1912.

An interesting account of irrigation in the West, from the Indians and Spanish missions to modern times, with special attention to the law of water rights.

HOGAN, J. V. *What is the future of American cotton?* Journ. Pol. Econ., Nov., 1912.

Speculative manipulations of the cotton market since 1902 have caused foreign spinners losses exceeding \$500,000,000 and stimulated cotton cultivation on an expanding scale in many countries. The control of the cotton market by the United States will consequently soon be at an end.

LEIGHTON, M. O. *The federal water-power policy*. Engg. News, Dec. 12, 1912.

Summary of provisions of act of 1910 relating to water-power dams on navigable streams, and the regulations issued by the Secretary of the Interior and the Secretary of Agriculture for the use of water-power on government lands. Concise and valuable.

LEWIS, J. H. *State and national water laws, with detailed statement of the Oregon system of water titles*. Pro. Am. Soc. of Civ. Engrs., Sept., 1912.

NEWELL, F. H. *Future progress in irrigation*. Engg. News, Dec. 5, 1912.

Sketch of irrigation movement from 1891 to present. Yield must be greatly increased; requires application of brains as well as water.

MCKINLEY, D. *The old west and the new*. Journ. Am. Bankers' Assoc., Nov., 1912.

Popular address sketching development of land policy, with special

reference to irrigation and conservation, closing with plea for steamship subsidies.

PALMER, T. G. *The influence of sugar beet culture on agriculture and its importance in relation to national economics.* Am. Sugar Industry, Nov., 1912.

Brief statement of reasons why sugar-beet culture leads to better farming, followed by charts from *Sugar at a Glance* recently published by the Department of Agriculture.

PAYEN, E. *La production, la consommation et les prix des divers métiers durant les dix dernières.* L'Econ. Franç., July 20, Aug. 3, 1912.

RAFFALOVICH, A. *L'industrie de la pêche maritime en Allemagne.* L'Econ. Franç., Aug. 24, 1912.

Most of the fishing enterprises are now carried on by a special type of stock company. The German importations of fish exceed, twice over, the catch of German vessels.

RAYMOND, R. W. *Our national resources and our federal government.* Bull. Am. Inst. Min. Engrs., Oct., 1912.

TOWNSEND, C. M. *Controlling the Mississippi river.* Engg. News, Oct. 31, 1912.

Argues for levees rather than reservoirs as a means of controlling floods, incidentally shows that the height of the 1912 flood was largely due to the confining of the river by levees.

WHITE, D. *A great reservoir of oil fuel.* Engg. News, Oct. 17, 1912.

Devonian black shale contains enough organic matter to warrant distillation when present oil pools show signs of exhaustion.

— *The twentieth annual irrigation congress.* Engg. News, Oct. 17, 1912.

Actual irrigation farmers are too busy to attend, hence the congress is made up mostly of other classes. Some claimed that the federal government should not insist on repayment for lands, but this plan did not carry. Principal practical problem now is drainage of irrigated lands.

Railways

(Abstracts by Ernest R. Dewsnap)

ALEXANDER, D. C., JR. *Victorian government railways.* Daily Con. & Trade Rep., Nov. 30, 1912. Pp. 9.

Describes rolling stock and shop equipment.

ANDREWS, F. *Agricultural promotion work of the railways.* Ry. Age Gaz., Nov. 15, 1912. Pp. 3.

A discussion of its character and importance.

BALLANTINE, N. D. *Is there really a car shortage?* Ry. Age Gaz., Oct. 25, 1912. Pp. 4.

Arises from insufficient use of equipment rather than from lack of cars.

BALTZER. *Die Tarife der Deutschen Schutzgebietsbahnen.* Archiv f. Eisenbahnw., Sept.-Oct., 1912. Pp. 18.

An explanation of passenger and freight classification and rates in Togoland and German East Africa.

BEVERIDGE, A. J. *Canada's government railway.* Rev. Rev., Nov., 1912.

BRADLEE, H. G. *The profitable limit of a five cent fare.* Stone & Webster Pub. Serv. Journ., Dec., 1912. Pp. 10.

The limit is four miles.

COHN, G. *Die Aussichten eines Staatsbahnsystems in England.* Archiv f. Eisenbahnw., Nov.-Dec., 1912. Pp. 16.

A summary of the papers on "The State in Relation to Railways" read at the 1912 Congress of the Royal Economic Society, by Messrs. Acworth, Tetley-Stephenson, Cleveland-Stevens, Schumacher, Pierre Leroy-Beaulieu, Mahaim, and Dewsnup.

COLSON, C. *A foreign view of American railways.* Ry. Age Gaz., Oct. 25, 1912. P. 1.

Criticizes the hostility of Congress to pooling agreements; fails to see what bearing the valuation of railway property can have upon rate making.

DESFORGES, G. *Le transport des bagages et la jurisprudence en France.* Journ. des Transports, Oct. 26, 1912. P. 1.

DIXON, F. H. *The trend of railway earnings.* Ry. Age Gaz., Dec. 27, 1912. Pp. 3.

Indications are that the net operating revenue of 1913 will show an increase over that of 1912.

EVERSMASS, A. *Die kanadische Ueberlandbahn und ihre wirtschaftliche Bedeutung. IV.* Archiv f. Eisenbahnw., Sept.-Oct., 1912. Pp. 35.

This final part is devoted mainly to statistics of finance and operation.

HARRISON, F. *A plan for industrial coöperation.* Ry. Age Gaz., Nov. 22, 1912. Pp. 2.

A proposition to base the wages of railway employees upon gross earnings.

HILL, J. J. *The country's need of greater railway facilities.* Ry. Age Gaz., Dec. 20, 1912. Pp. 4.

Improved terminal facilities are imperatively needed to avoid traffic congestion. The railway must be permitted to earn enough to pay the interest and principal of the heavy additional loans necessary.

JANDRON, F. L. *Economic aspects of discipline.* Ry. and Engg. Rev., Nov. 9, 1912. Pp. 1½.

JANDRON, F. L. *Efficiency and the railway wage problem.* Engg. Mag., Nov., 1912. Pp. 6.

Advises graduated efficiency rewards to employees.

JÄNECKE, *Die weitere Ausbau der Bahnen Brasiliens.* Archiv f. Eisenbahnw., Nov.-Dec., 1912. Pp. 14.

JURGENSEN, D. F. *Reproduction cost now as a basis for railroad rates.* Ry. & Engg. Rev., Nov. 30, 1912. Pp. 2.

As representing "fair" value, cost of reproduction now has no basis in law or fact. "Fair" value can be no more than present value of items of physical property rightfully included in the inventory.

LOUIS, C. E. *Les compagnies de chemins de fer et leur personnel.* Réf. Soc., Dec., 1912. Pp. 8.

With the development of traffic on the French railways, the share of earnings secured by the employee has steadily increased, while that of the stockholder has remained unchanged.

McPHERSON, L. G. *A concerted movement of the railways.* No. Am. Rev., Jan., 1913. Pp. 10.

Explains the purpose of the Bureau of Railway Economics and describes the nature of the work it performs.

MEAD, E. S. *The railway labor situation.* Ry. Age Gaz., Oct. 25, 1912. Pp. 2.

Railway labor needs to be brought to realize that the railways are entitled to a fair return upon the fair value of their property.

OVERMANN, J. *Die Holländische Eisenbahngesellschaft.* Archiv f. Eisenbahnu., Sept.-Oct., 1912. Pp. 10.

A list of the annual rates of dividend since 1840.

PAWLowski, A. *L'arbitrage facultatif et obligatoire.* Journ. des Transports, Sept. 28, 1912. Pp. 2½.

Compulsory arbitration is condemned.

PAWLowski, A. *Les chemins de fer d'Etat et M. Berthélémy.* Journ. des Transports, Aug. 31, 1912. Pp. 1½.

In the recent edition of his treatise on administrative law, Professor Berthélémy has recanted his former belief in state administration of railways.

PAWLowski, A. *L'état, industriel et financier.* Journ. des Transports, Dec. 7, 1912. Pp. 2.

A severe criticism of the French postal administration on the ground of budgetary irregularities and operating inefficiency.

PAWLowski, A. *Les grèves des cheminots espagnols en 1912 et leur caractère.* Journ. des Transports, Oct. 26, 1912. Pp. 4.

PAWLowski, A. *La nationalisation des chemins de fer anglais.* Journ. des Transports, Sept. 7, 1912. Pp. 3.

PAWLowski, A. *L'unification des tarifs de chemins de fer.* Journ. des Transports, Sept. 14, 21, 1912. Pp. 4.

In an article in the "Revue Politique et Parlementaire," M. Richard Block shows the impracticability of uniform tariffs in France by a study of tariffs concerned with the metallurgical and coal industries.

RIPLEY, W. Z. *The course of railway rates since 1870.* Ry. Age Gaz., Nov. 8, 1912. Pp. 6.

Ton-mile revenue fails to indicate the real movement of freight rates in this country.

SCHIMPF, G. *Wirtschaftliche Betrachtungen über Stadt- und Vorortbahnen III, IV.* Archiv f. Eisenbahnw., Sept.-Oct., 1912. Pp. 61.

The third part deals with construction and its costs; the fourth, with operating systems and their costs.

WEISSENBACH, P. *Der Abschluss der Verstaatlichung der Hauptbahnen und zehn Jahre Staatsbetrieb in der Schweiz. II.* Archiv f. Eisenbahnw., Sept.-Oct., 1912. Pp. 40.

Main attention is given to the classification of employees for purposes of remuneration.

WINCHELL, B. L. *Drift toward government ownership of railways.* Atlantic, Dec., 1912. Pp. 13.

Public ownership of our railways would tend to increase cost of operation, would make rates more inelastic, and would lead to political corruption.

WITTEK, W. *Die österreichischen Staatsbahnen in den Jahren 1901-1910.* Archiv f. Eisenbahnw., Nov.-Dec., 1912. Pp. 17.

From 1901 to 1910, the net income of the Austrian state railways varied between 1.65 and 3.01 per cent on capital invested.

— *Bankers hear of railway inefficiency.* Ry. & Engg. Rev., Nov. 9, 1912. P. 1.

An extract from a speech of Mr. Emerson before the Illinois Bankers' Association, with editorial criticism of its accuracy.

— *The effect of the automobile on railway traffic.* Ry. Age Gaz., Oct. 18, 1912. Pp. 1½.

In places, railway passenger earnings are being affected materially. Motor trucks have captured some of the short-haul freight of the railways.

— *Freight business on a New England electric railway.* Electric R.R. Journ., Nov. 9, 1912. Pp. 1½.

A description of the methods used to develop electric railway freight and express traffic in virgin territory.

— *Have freight rates increased?* Ry. Age Gaz., Nov. 8, 1912. Pp. 1½.

The advance in rates since 1900 has been slight, incomparably less than the reduction between 1890 and 1900.

— *Mail carrying railways underpaid.* Ry. Age Gaz., Nov. 15, 1912. Pp. 4.

Statement by Committee on Railway Mail Pay.

— *New railway built during 1912.* Ry. Age Gaz., Dec. 27, 1912. Pp. 3½.

— *Parcels post rates and express charges.* Greater N. Y., Dec. 16, 1912. Pp. 3.

A comparison of charges.

— *Railway officers on the situation.* Ry. Age Gaz., Dec. 27, 1912. Pp. 8.

Replies generally favor a permanent national wage commission. Business prospects for 1913 are regarded as good.

— *Report of the committee on railroad taxes and plans for ascertaining fair valuation of railroad property.* Electric Ry. Journ., Nov. 23, 1912. Pp. 2.

— *Select list of references on the commerce court.* Special Libraries, Dec., 1912. Pp. 5.

Contains 127 titles.

— *Statistics of electric railway companies.* Elec. Ry. Journ., Dec. 7, 1912. Pp. 1½.

Mileage and capitalization statistics for the separate states are given.

— *Statistics of railways.* Archiv f. Eisenbahnwesen, Sept.-Oct., Nov.-Dec., 1912.

Sept.-Oct.—Belgium (1910), Bulgaria (1909), Chantung Ry. (China) 1911, Denmark (1911), France (1910), Hungarian State Rys. (1910), Holland (1910), Norway (1911), Rumania (1911), Servia (1910); Nov.-Dec.—Algeria-Tunis (1908), Hungary (1910), Italy (1911), Switzerland (1910), United States (1910).

— *Traffic count in Philadelphia.* Electric Ry. Journ., Nov. 2, 1912. Pp. 3½.

Describes the methods adopted by the transit commissioner of Philadelphia in studying the conditions of street-car traffic in that city.

— *Why 5,000 trespassers are killed yearly.* Ry. Age Gaz., Dec. 20, 1912. Pp. 5½.

— *Le projet de loi espagnol sur les rapports entre les compagnies de chemins de fer et les cheminots.* Journ. des Transports, Nov. 16, 1912. Pp. 2.

Text of a government bill before the Cortes that proposes the establishment of railway conciliation boards and of a tribunal of arbitration.

— *Les réformes administratives dans les chemins de fer allemands de l'état.* Journ. des Transports, Oct. 19, 1912. Pp. 1½.

A summary of Herr von Voelecker's paper. (See AMERICAN ECONOMIC REVIEW, vol. 11, p. 988.)

— *Le relèvement des tarifs-voyageurs des chemins de fer de l'état hongrois.* Journ. des Transports, Sept. 28, 1912. Pp. 1½.

Details of the changes are given.

— *Six ans de gestion des chemins de fer de l'état italien.* Journ. des Transports, Nov. 2, 1912. Pp. 2.

Each year the operating results of the Italian state railways have become less favorable to the Treasury.

— *Die Eisenbahnen Deutschlands, Englands und Frankreichs in den Jahren 1906 bis 1908.* Archiv f. Eisenbahnw., Nov.-Dec., 1912. Pp. 31.

The customary annual comparison of the financial and operating results obtained in the three countries named.

— *Verkehrswesen in Alaska.* Archiv f. Eisenbahnw., Nov.-Dec., 1912. Pp. 6.

Accounting

(Abstracts by John Bauer)

BELLON, M. *L'organisation française des experts-comptables.* L'Econ. Franç., Sept. 7, 1912. Pp. 3.

Describes the organization of a recently created association of expert accountants in Paris.

BENNETT, R. J. *The audit of a building and loan association.* Am. Bldg. Assoc. News, Dec., 1912. Pp. 11.

Discusses the function of a building and loan association, describes the methods of stock issue, outlines the usual scheme of organization, and gives rules as to audit of an association's accounts.

CLINCH, S. H. *Some notes on the law relating to companies limited by shares.* Accountant, Nov. 16, 1912. Pp. 7.

English law and practice.

DONALDSON, J. S. *Railway accounting, mental and mechanical.* Ry. Age Gaz., Sept. 6, 1912. Pp. 3.

A paper read before the Association of American Railway Accounting Officers in June, 1912. Discusses several short cuts in railway office organization and record keeping, substituting mechanical devices for clerks wherever possible and profitable.

FORSE, W. H., JR. *The classification of accounts as adapted to coördinate departments.* Elec. Ry. Journ., Dec. 21, 1912.

Refers to electric railways, and considers how the revenues and expenses pertaining to railway operation shall be kept separate from those of light and power, or other operations.

GILLETTE, H. P. *The use of depreciation data in rate-making and appraisal problems.* Elec. World, Nov. 2, 1912. Pp. 5.

Distinguishes between natural and functional depreciation and discusses several depreciation formulas; proposes the unit-cost formula.

GONTHIER, G. *L'organisation de la profession de comptable public dans l'Amérique du Nord.* Rev. Econ. Canadienne, Nov., 1912. Pp. 5.

Sketches the history of the accountancy profession in North America, especially in the United States.

HAGENAH, W. J. *Intangible values of electric railways and their determination from accounts.* Elec. Ry. Journ., Oct. 9, 1912. Pp. 5.

Centers around the idea of a "fair return" upon capital invested in electric railways. The tendency of commissions is to allow a fair rate upon the "cost of reproduction," but this basis of capitalization does not regard many costs which the inventor actually incurred, for example, deficits in early operation, cost of consolidations, discarding of old and impartially up-to-date machines, etc. These costs should be capitalized and a fair return allowed upon them.

JENKINS, F. P. *Some notes on trust accounts.* Accountant, Oct. 19, 1912. Pp. 4.

LASHER, F. B. and others. *Report of the joint committee on engineering accounting.* Elec. Ry. Journ., Oct. 11, 1912. Pp. 5.

Urges the subdivision of the maintenance of equipment accounts, into power and plant equipment, and rolling stock equipment. Discusses scientific management, depreciation, costkeeping, etc.

LEAKE, P. D. *The need of present accounting for part unexpired capital outlay.* Accountant, Oct. 12, 1912. Pp. 6.

Considers outlay on plant as prepaid expense, and depreciation is the amount of this expense that has been consumed through the passage of time. The year's depreciation should be in proportion to the total expected output of the plant.

LEAKE, P. D. *The use and misuse of the sinking fund.* Accountant, Nov. 23, 1912. Pp. 6.

Shows that the existence of a sinking fund often creates a false sense of financial security.

NELSON, C. H. *Modern accountancy in its relation to commerce.* Accountant, Nov. 30, 1912. Pp. 7.

POTTER, J. *Debentures.* Accountant, Oct. 26, 1912. Pp. 6.

Describes the nature of debenture bonds under English law and practice.

SALIERS, E. A. *Compulsory depreciation charge.* Journ. Account., Dec., 1912. Pp. 6.

Considers the advisability of requiring by law proper depreciation charges before net profits can be applied to dividends.

SCOTT, G. G. *Invoice discounts.* Journ. Account., Dec., 1912. Pp. 9.

Considers the nature of invoice discounts, especially how such discounts affect cost values of goods. Holds that discounts are costs and are not to be considered as interest.

SCOVELL, C. H. *Sound accounting in credit relations.* Journ. Account., Nov., 1912. Pp. 17.

Emphasizes that bank credit should be extended to a concern only when its statement of assets and liabilities has been certified by a firm of high-class auditors.

SMITH, A. *The abuse of the audit in selling securities.* Journ. Account., Oct., 1912. Pp. 11.

WILLIAMS, H. D. *Trust company audits.* Journ. Account., Oct., Nov., Dec., 1912. Pp. 6, 12, 20.

————— *Fixed charges and power cost.* Electric Ry. Journ., Oct. 26, 1912. Pp. 2.

Argues that fixed charges of plant should be included in calculations of power costs.

————— *Report of committee on finance and currency submitted at meeting of the chamber held October 3d and unanimously adopted.* Mo. Bull. N. Y. Chamber of Commerce, Nov., 1912. Pp. 40.

Surveys what has been done toward establishing the new accounting system in New York city. Progress has been slow; (1) the task has been large and complex; (2) there has been much opposition; (3)

the comptroller has had incomplete legal authority to proceed. The system's aims are: (1) a scientific budget; (2) control over expenditures and supplies; (3) a functional cost-system for all departments; (4) periodical financial statements.

— *Report of the joint committee on express and freight accounting.* Elec. Ry. Journ., Oct. 10, 1912. P. 1.

Considers possible plans of dividing the operating expenses of an electric railway company between the passenger and goods traffic. No satisfactory plan yet worked out.

— *What is plant?* Accountant, Nov. 30, 1912. Pp. 4.

Legally defined: all goods and chattels which a business man keeps for permanent employment in his business. In any concrete case, the term lacks definite limitations.

Public Utilities

ALLISON, J. E. *Ethical and economic elements in public service valuation.* Quart. Journ. Econ., Nov., 1912.

BOYER, W. C. *Physical appraisal.* Pro. Brooklyr. Engrs' Club, Jan., 1912.

CRAVATH, J. R. *Street-lighting rates.* Elec. Wld., Oct. 5, 1912.

CROSBY, O. T. *Automatic rate regulation.* Elec. Ry. Journ., Oct. 11, 1912.

GANNON, L. A. *Electric franchises.* Can. Engr., Aug. 29, 1912.

JACKSON, HENRY D. *Rates for electricity.* Engg. Mag., Dec., 1912.

KNOWLES, M. *State regulation of public utilities.* Engg. News, Oct. 3, 1912.

MEADE, E. S. *How the investment banker investigates public utilities.* Lip-
pincott, Oct., 1912.

NASH, L. R. *Valuation of public service properties.* Stone & Webster Pub.
Serv. Journ., Oct., 1912.

RAFFALOVICH, A. *Les régies municipales intéressées en Allemagne: la participation du capital privé aux entreprises des villes.* L'Econ. Frane., Dec. 30, 1912.

STEAMNS, R. B. *The Milwaukee fare case.* Elec. Ry. Journ., Oct. 11, 1912.

TANGORRA, V. *Delle pubbliche imprese e delle entrate che ne provengono.* Giorn. d. Econ., Mar., 1912.

A systematic study of the basis of rates, in public service industries.
VITTINGHOFF, H. von. *The regulation of the service rendered by gas com-
panies.* Stone & Webster Pub. Serv. Journ., Oct., 1912.

— *Annual conference of the municipal tramways association of Great Britain.* Elec. Ry. Journ., Nov. 2, 1912.

— *The appraisal of intangible values in public utilities.* Elec.
Wld., Oct. 26, 1912.

— *The appraisal of public service properties as a basis for the regulation of rates. Discussion of the paper of C. E. Grunsky.* Pro. Am. Soc. of Civ. Engrs., Aug., 1912.

— *Bibliography of interest to public service corporations.* Special
Libraries, Nov., 1912.

— *A comparative study of the four principal methods of apprais-*

ing the value of public utilities, with special reference to the valuation of the Freeport (Ill.) water works properties. Engg. & Con., Oct. 2, 1912.

— Decision of Wisconsin commission in Superior case. Elec. Ry. Journ., Nov. 23, 1912.

— Operations of the companies under the 1907 ordinances. Elec. Ry. Journ., Oct. 5, 1912.

— Report of committee for determining the proper basis for rates and fares. Elec. Ry. Journ., Nov. 30, 1912.

Corporations and Trusts

(Abstracts by M. H. Robinson)

ANDERSON, B. M. *Competition versus monopoly the issue*. Independent, Oct. 31, 1912.

Roosevelt is in favor of the monopolization of various manufacturing industries, and Wilson is opposed. Examines some of the economics of combination and advocates the views credited to Wilson.

COOK, F. H. *The need and proper scope of federal legislation against restrictions upon competition*. Am. Law Rev., Sept.-Oct.

Distinguishes between restraint of trade and restriction of competition, and shows that the courts have emphasized the former. Believes more attention should be given to the latter.

HARR, W. G. *The place of trusts in jurisprudence*. Law Quart. Rev., July, 1912.

JAHN, G. *Ursachen und Triebkräfte der Privatangestelltenbewegung*. Zeitschr. f. Sozialwiss., Dec., 1912.

Production in large establishments has developed a class intermediary between laborers and officers. This class is increasing and its rise has already occasioned new social problems, such as pensions, care of the sick, and political protection for the new class.

KENNEDY, J. S. *The New York public service commissions*. Forum, Nov., 1912.

An excellent review of the first five years' work of the New York Public Service Commission, by its secretary.

LANDSBURG, A. *Prospekthaftung*. Die Bank, Nov., 1912.

A discussion of the responsibility of the promoter for statements made in the prospectus and the effect of recent decisions of the German courts.

LUER, R. *Publicity and trusts*. Rev. Rev., Sept., 1912.

Explains the Canadian and Massachusetts systems of dealing with the trust problem by means of investigating commissions.

MAYER, J. *The just value of monopolies and the regulation of the prices of their products*. Pro. Am. Soc. of Civ. Engrs., Aug., 1912.

A further discussion of the problem of controlling monopolies, including value, justice, and the control of prices. Favorable to the commission method.

MONTAGUE, G. H. *The American patent system.* No. Am. Rev., Nov., 1912.

The American patent system is explained, theoretically and historically, and strongly defended. All changes proposed in Congress in recent years are opposed.

MONTGOMERY, R. H. *Federal control of corporations.* Journ. Account., Oct., 1912.

Some kind of federal control of corporations is imminent, and it is necessary that future legislation on the subject be carefully considered by experts. In this work public accounts must be utilized if the control is to be successful.

PINSER, F. *Herrn v. Gwinner's petroleummonopol.* Die Bank, Nov., 1912.

History of the petroleum situation in Germany during the past year, indicating that the Standard Oil Co. has not suffered, and predicting that a legalized monopoly will prove a stumbling block in the future.

REEDING, E. L. *The coal monopoly.* Everybody's, Dec., 1912.

Although based upon the government records in the Anthracite case, the article is punctuated with misleading statements, rendering it of no value to the student, and a cause of misunderstanding to the uninformed.

STEVENS, W. S. *The dissolution of the powder trust.* Quart. Journ. Econ., Nov., 1912.

A brief description of the plan for the dissolution of the powder trust and the creation of competing companies. Author expresses doubt as to the efficiency of the plan.

— *The combined investigation act, 1910—United Shoe Machinery Company case.* Labour Gaz., Nov., 1912.

Report of the committee appointed to investigate the operations of the company in Canada; also a minority report. As this is one of the first cases under the Canadian act, it possesses special interest.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

BADGER, J. S. *Arbitration in Australia.* Elec. Ry. Journ., Oct. 10, 1912. Pp. 2.

The unions will not submit when the awards are adverse, and it is impossible to imprison large numbers of workmen. The writer is manager of the Brisbane (Australia) Tramway Company.

DE BOYER-MONTEGUT, R. *Les bureaux de placement municipaux et les bourses de travail.* Réf. Soc., Nov. 16, 1912. Pp. 14.

Inferior results obtained by the French system of public employment offices chiefly due to the lack of coöordination between the offices.

CARLTON, F. T. *Scientific management and the wage-earner.* Journ. Pol. Econ., Oct., 1912. Pp. 10.

Efficiency engineering can be highly successful only when the coöperation of the workmen is secured, and this can be done only through the introduction of collective bargaining.

GAUMONT, J. *La vie chère et le syndicalisme.* Rev. Socialiste, Sept. 15, 1912. Pp. 13.

Syndicalism has small effect on the factors tending to increase the cost of living. Coöperation of consumers is the remedy.

GIGOT, A. *La grève noire de 1912 en Angleterre.* Réf. Soc., Nov., 1912. Pp. 19.

The causes leading to the English coal strike, negotiations, enactment of the miners' minimum wage law, and effect of the law on wages. COMPERS, S. *Compulsory arbitration in the R.R. engineers' award.* Am. Federationist, Jan., 1913. Pp. 16.

Strongly opposes the recommendation in favor of compulsory arbitration made by the arbitration board.

GUYOT, Y. *La réglementation du travail des employés.* Journ. des Econ., Dec., 1912. Pp. 16.

Caustic review of the evidence taken by the Conseil Superior de Travail concerning the effects of the regulation of working hours in mercantile establishments.

H. F. *La main-d'œuvre étrangère.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 14.

Discusses the extent to which foreign workmen are employed in France, the existing and proposed regulations relating to such workmen, and the feeling among employers and native workmen as to the desirability of restrictive measures.

HIASI, F. W. *Der englische Kohlenstreik.* Jahrb. f. Nat. Oek., May, 1912. Pp. 28.

A detailed and excellent account of the strike.

HOLDEN, A. E. *Railroad strikes since 1877.* Am. Federationist, Nov., 1912; Jan., 1913. Pp. 3, 4.

Deals with the strike on the Louisville and Nashville Railroad and the strike on the Toledo and Ann Arbor Railroad in 1893.

JACKSON, C. *Apprenticeship.* Edinb. Rev., Nov., 1912.

Ought immediately to raise the age of full time attendance at school to fifteen and make some provision for part time instruction till eighteen.

KELLEY, F. *Minimum-wage laws.* Journ. Pol. Econ., Dec., 1912. Pp. 11.

Brief account of the Massachusetts law and some considerations in favor of the enactment of minimum wage laws.

KLEIN, F. *Soziale Schutzworschriften für Privatangestellte.* Zeitschr. f. Volkswirtsch. 1912. Pp. 31.

A summary of existing social legislation in Germany and Austria, with brief consideration of the desirability of extending each of the forms of legislation to cover classes of workers not at present included.

KÖRPER, H. *Die Fortschritte des Arbeitstarifvertrages in Deutschland, Oesterreich und Grossbritannien.* Jahrb. f. Nat. Oek., July, 1912. Pp. 28.

A review and summary of recent official publications dealing with collective contracts.

LACOMBE, E. *La question des dix heures.* Mouv. Soc., Nov. 15, 1912. Pp. 24.

Probable effects of the enactment of the bill introduced July 7, 1910, which imposes the ten-hour day on the great mass of French adult male workmen.

DE LAS CASES, P. *Les subventions municipales aux caisses de chômage.* Réf. Soc., Nov. 16, 1912. Pp. 7.

A brief review of the growth of the so-called "Ghent system" of unemployment insurance, under which the cities or, in some cases, the state subsidizes the unions paying such insurance.

LAUCK, W. J. *The vanishing American wage-earner.* Atlantic, Nov., 1912.

Machinery makes possible the employment of unskilled immigrants, who take the place of the natives.

LAZARD, M. *Les bureaux de placement en France et à l'étranger.* Réf. Soc., Nov. 16, 1912.

The most important developments in the recent history of employment bureaus have been the tendencies toward centralization and state management.

LEWIS, H. T. *The economic basis of the fight for the closed shop.* Journ. Pol. Econ., Nov., 1912. Pp. 25.

The closed shop prevents the breaking-down of union conditions through the introduction of lower paid workmen, particularly immigrants.

LOUIS, P. *La fédération des syndicats néerlandais.* Mus. Soc. Mém., Oct., 1912. Pp. 30.

The history, composition, and functions of the federation are briefly described.

LUSK, H. H. *Industrial war.* Forum, Nov., 1912.

Arbitration is merely a temporizing remedy. Regulation of wages and dividend rates by law is necessary.

MARRIOTT, J. A. R. *Syndicalism and socialism.* Nineteenth Cent., Nov., 1912.

The social unrest is due chiefly to the prevalence among laborers of erroneous economic views.

NIELSEN, A. *Den engelske kulstreich og dens Biläggelse.* Nat. ök. Tids., July-Aug., 1912.

An account of the settlement of the recent coal strike in England through the enactment of the minimum wage law.

ORTH, S. P. *Battle line of labor.* World's Wk., Nov., Dec., 1912; Jan., 1913.

The conflict between laborers and employers described in concrete terms.

PIC, P. *Le minimum legal de salaire dans l'industrie privée.* Rev. Polit. et Parl., Sept. 10, 1912. Pp. 21.

Favors the legal recognition and enforcement of agreements between trade unions and employers.

PRATT, J. H. *Convict-labor in highway construction.* Engg. & Con., Oct. 23, 1912.

Discusses the economic aspects of the employment of convicts in road construction.

SCHMIER, E. *Arbeitslohn und Produktionstechnik in der Heimarbeit*. Zeitschr. f. Sozialwiss., Nov., Dec., 1912. Pp. 14, 13.

Argues against the enactment of a minimum wage law for German home workers. The home worker can only be helped by improvements in technique, particularly the introduction of electrical power.

SÖRER, R. *Untersuchungen über Auslese und Anpassung der Arbeiter*. Zeitschr. f. Volkswirtsch., 1912. Pp. 21.

A critical summary of the study of the selective and adaptive influences of the factory system on the workers, recently made by the Verein für Sozialpolitik.

URBAN, W. M. *The philosophy of labor*. Atlantic, Dec., 1912.

WARE, F. *Labour and internationalism*. Nineteenth Cent., Sept., 1913. Pp. 12.

After reviewing the history of internationalism, concludes that the efforts towards internationalism "show no more signs of practical achievement today than at any former period."

WEBB, S. *The economic theory of a legal minimum wage*. Journ. Pol. Econ., Dec., 1912.

The enforcement of a legal minimum wage will increase production. Those thrown out of employment must be dealt with outside ordinary industry.

ZAMANSKI, J. *La femme doit-elle travailler?* Mouv. Social, Nov. 15, 1912. Pp. 15.

A philosophic consideration of the reasons for special legislation for female workers and of the forms which such legislation should take.

ZIMMERMANN, W. *Organizationszwang*. Soziale Praxis, Oct. 3, 1912. Pp. 3.

A critical review and summary of Kestner's *Wesen der Organisationszwang*.

— *International trade union statistics*. N. Y. Lab. Bull., Sept., 1912. Pp. 21.

— *The outlook for industrial peace*. Ann. Am. Acad., Nov., 1912. Pp. 143.

A valuable series of papers on conciliation and arbitration, profit-sharing, industrial betterment, scientific management and industrial education in their relations to industrial peace.

— *The Pole and Slave as track laborers*. Ry. Age Gaz., Oct. 18, 1912. Pp. 3.

The fifth of a series of discussions by railroad supervisors of the characteristics of the various types of maintenance-of-way workmen.

— *Some paradoxes of workingmen's compensation*. Stone & Webster Pub. Serv. Journ., Nov., 1912. Pp. 4.

Under the Massachusetts Workingmen's Compensation Act the cost of medical and hospital service in accident cases has greatly increased.

— *The Zurich conference.* World's Lab. Laws, Nov., 1912. Pp. 20. A brief account of the Zurich conference of the International Association for Labor Legislation.

— *Une enquête hollandaise sur l'emploi des femmes mariées dans les fabriques.* L'Econ. Franc., Sept. 28, 1912. Pp. 2. The chief statistical facts of a report on this subject by the Dutch Bureau of Labor.

— *Der Dresdner Kongress der christlichen Gewerkschaften.* Soziale Praxis, Oct. 17, 1912. Pp. 6. Summaries of the more important resolutions and discussions.

Prices and Cost of Living

(Abstracts by Henry J. Harris)

APFELT, K. *Die neuzeitliche Entwicklung der Baumwollpreise und das Baumwollpreisproblem.* Jahrb. f. Nat. Oek., Sept., 1912. Pp. 46.

Price of cotton is subject to violent fluctuations, *e.g.*, middling upland during 1911 ranged from 9.2 cents to 16.15 cents, or 75.5 per cent variation; also in recent years there has been a marked increase both in the fluctuations and in the level of price. Efforts of growers and of spinners to organize for the purpose of taking advantage of the fluctuations for their respective groups have so far met with little success. Need of extension of cotton growing in parts of the world outside of the United States.

BAUER, J. *Rising prices and the public.* Pop. Sci. Mo., Dec., 1912. Pp. 9.

A period of rising prices causes hardships to certain groups; speculation and extravagance are stimulated. Sound business is hampered by the risk in making long-term contracts.

BLACKMAN, W. F. *The increasing cost of living; its cause and cure.* Rollins College Bull., Dec., 1912.

Accepts the gold theory.

BRANDT-WYR, R. *Hauswirtschaftliche Nahrungsmittelkonsumtion.* Jahrb. f. Ges. Verw. u. Volksw. 66 Jahrg., Heft 2. Pp. 33.

Shows the proportion of income and expenditure devoted to food in the light of recent studies on the cost of living. These expenditures in private families are contrasted with those for the same purpose in institutions, *e.g.*, barracks, hospitals, prisons, etc., where a scientific dietary is in use. The private family pays high prices and is not well nourished.

BUSCH, A. *Die Preisbewegungen auf dem Lebensmittelmarkt zu Frankfurt a. M. und deren Einfluss auf die Haushaltsführung der Bevölkerung.* Beiträge zur Statistik der Stadt Frankfurt a. M., herausgegeben durch das Statistische Amt, No. 10, Oct., 1912. Pp. 58.

A careful, thorough study of the course of prices of meats and vegetables in the city of Frankfort-on-the-Main. Wholesale and some retail prices are given for 1900-1911, together with elaborate charts.

COHN, E. *Livets Dyrhed*. Nat. ök. Tids., May-June, 1912.

A study of the increased cost of living, based on statistics from 1897 and on. Higher wages and increasing difficulties in producing enough raw material and food products are fully as important factors as the increased gold supply. Retail prices are materially increased by demands for better equipment and service. Different classes are raising their standards of living.

COX, H. *Politics and prices*. Edinburgh Rev., Oct., 1912. Pp. 19.

Writer insists that "there is not a scrap of reliable evidence that the general purchasing power of the golden sovereign has declined." The depreciation of British government securities is due to the policies of the Lloyd-George administration.

FERRIN, A. W. *The high cost of living*. Moody's Mag., Nov., 1912. Pp. 4.

Advocates Professor Irving Fisher's plan for an international commission to study prices.

FISHER, I. *High cost of living*. No. Am. Rev., Dec., 1912. Pp. 18.

Estimates that there will probably be an annual average increase in prices of at least two per cent for some years, though there is a possibility or even probability of temporary recessions like that following the crisis of 1907.

JORDAN, D. S. *Taxing the cost of living*. World's Wk., Jan., 1913. Pp. 9.

Fall in the value of gold due to excessive and growing financial exactions, "produced by the steadily growing encroachment of government on the individual through the indirect tax and the deferred payment, the two agencies of tyranny in the past, now used for the self-oppression of democracy."

NICHOLSON, J. S. *The rise of prices and the quantity theory*. Quart. Rev., Oct., 1912. Pp. 16.

Considers Professor Fisher's rehabilitation of the quantity theory unsuccessful. In some respects the revised version is retrograde.

OLMSTED, V. H. *The purchasing power of farm products*. Annual Report of Dept. of Agriculture, 1912. Pp. 8.

Tables showing farm prices of farm products in 1911, 1910, 1909, and 1899; prices of articles purchased by farmers in these years; quantities purchasable by product of one acre in these years. "It appears that the purchasing power of one acre of crops in 1911 was 1.2 per cent less than in 1910, 5.7 per cent less than in 1909, and 41.6 per cent greater than in 1899."

PERROTT, H. R. *The family budget of an Indian raiyat*. Econ. Journ., Sept., 1912. Pp. 7.

An account of the possessions, income and expenditure of a typical small cultivator in India.

PRATT, E. E. *Marketing facilities and their relation to the cost of living*. Journ. Home Econ., Oct., 1912. Pp. 9.

Present methods of marketing food supplies, wasteful and inadequate. Remedies suggested are coöperation, better terminals, and municipal markets.

RETBACH, A. *Die Preisentwicklung seit dem Beginn des neuen Jahrhunderts.* Soz. Rev., Nov. 1, 1912. Pp. 24.

The increase of prices of food products in the last decade is due to higher wages, speculation in agricultural products, increasing demand from urban population, and higher costs of distribution.

— *Farm value of important [agricultural] products. Index price of farm products. Farm value of important crops. Range of prices of agricultural products at important markets.* Crop Reporter, Nov., 1912. Pp. 3.

Tables giving prices up to November 1, 1912.

— *Index numbers.* Bull. l'Inst. Intern. Statist., XIX, 3. Pp. 120.

The secretary general of the International Statistical Institute addressed, on January 31, 1911, a circular letter to the members, requesting them to send to the Institute tables of index numbers of prices for the period 1881-1910. In reply to this circular, data referring to the countries specified below were received from the persons named; in some cases explanatory matter accompanied the tables.

Bavaria—Dr. F. Zahn, 1881-1910; City of Brunswick—F. W. R. Zimmermann, 1881-1910; City of Lübeck—Dr. Hartwig, 1886-1910; Austria-Hungary—Dr. Jankovich, 1867-1909; Belgium—H. Denis, 1850-1910; E. Nicolai, 1881-1910; M. Sauveur, 1881-1909; City of Brussels—E. Waxweiler, 1881-1910; Denmark—M. Koefoed, 1891-1910; France—A. de Foville, 1881-1910; L. March, 1881-1910; City of Amsterdam—P. Falkenburg, 1881-1911; Holland—H. W. Methorst, 1881-1911; Canada—Coats and Godfrey, 1890-1910; Japan—N. Hamabusa, 1881-1909; New South Wales—T. A. Coghlan, 1860-1910.

— *Report on cost of living commission.* Journ. Dept. Labour (New Zealand), Oct., 1912. Pp. 20.

Summary of commission's report. Commission finds that cost of living has increased at least 16 per cent in 20 years, food stuffs 20 per cent. Land has increased in value because of rise in agricultural products; standard of living has risen; trusts, etc. have had an "appreciable influence" in raising prices. Leading causes of rise in prices include increased money supply, higher cost of production, rural depopulation, and diminishing returns from natural resources. Commission's recommendations include improved statistics, international commission on cost of living, better school system, stricter regulation of trusts, dissolution of land monopolies, and municipal ownership of markets.

— *Coût de la vie.—Suisse, Suède, Finlande, Danemark, Australie.* Bull. Stat. Gén. de la France, Oct., 1912. Pp. 8.

Digests of official reports: Switzerland, on railway employees in 1911; Sweden, on prices and rents in 1901-9; Finland, on 380 workmen's families in 1908-9; Australia, on 212 families in 1910-11.

— *Die Fleischsteuerung vor dem Reichstag.* Soziale Praxis, Dec. 5, 1912. P. 1.

Summary of three-day debate in Reichstag on proposals to reduce price of meats by lowering tariff on fodder, amending meat inspection law, raising embargo on meat importations, and abolishing importation certificates. Government refused to accept these proposals and declared that relief must come from action by the various states. Chancellor suggested that cities make contracts with cattle raisers, eliminating the middleman; states should encourage cattle raising and fodder growing; municipalities should improve marketing facilities.

— *Die Kosten der Lebenshaltung russischer Arbeiter und Arbeiterinnen.* Reichs-Arbeitsblatt, Nov., 1912. Pp. 3.

Gives summary of study made in 1908 of 632 budgets of Russian wage-earners.

— *Statistik der Preise im Jahre 1911.* Zeitschr. Bay. Stat. Landesamts, No. 2-3, 1912. Pp. 12.

Average or predominant prices for Bavaria and for 69 Bavarian localities in 1911; principally food products.

— *Zur Statistik der Preise.* Vierteljahrsshefte z. Stat. d. Deutschen Reichs, No. 2, 1912. Pp. 8.

A special compilation of prices. Gives prices of cattle in ten German cities and in foreign countries for the first quarter of years 1908-1912; wheat prices on German and foreign exchanges for 1907-1911; coffee in Hamburg and Mannheim, 1884-1911; wool in German markets, 1902-1911; wholesale prices of important commodities in London by months for 1906-1910, and iron ore prices in England for 1890-1910.

— *Zur Statistik der Preise.* Vierteljahrsshefte z. Stat. d. Deutschen Reichs, No. 3, 1912. Pp. 8.

A special compilation of price statistics on: cattle prices in 10 German cities in the second quarter of the years 1908-1912; same for foreign countries; cattle prices by months on German markets for year 1911; meat prices in 4 English cities for 1908-1911; wholesale prices of wheat in 6 Austrian markets for 1908-1911.

Public Finance

(Abstracts by C. C. Williamson)

BARONE, E. *Studi di economia finanziaria.* Giorn. d. Econ., Apr.-May, 1912. Pp. 45.

Several studies in the theory of finance, concerning the general theory of taxation and the incidence of taxes. Illustrated by an extended series of diagrams.

BROCK, F. H. *Om den lämpligastemetoden för var sockerbeskattning.* Ek. Tids., Nos. 9, 10, 1912.

Reviews briefly the law of monopoly price and on this basis tries to show that the most satisfactory way to tax the sugar industry in Sweden would be to levy a sliding scale tax on production, increasing the tax with the increasing prices of the product.

BUCK, L. *Die Entwicklung des Steuersalls bei den kleinen und mittleren Einkommen in Preussen seit der Novelle vom 26. Mai 1909.* Verwaltung und Statistik., July-Aug., 1912. Pp. 12.

BYRNE, H. D. *Single taxation.* Case and Comment., Dec., 1912. Pp. 3.

CABBIATI, A. *La nominatività dei titoli al portatore e la imposta di successione.* Rif. Soc., Nov., 1912. Pp. 61.

CLARKE, J. A. *Taxation.* Canadian Munie. Journ., Oct., 1912. P. 1.

The author is an alderman of Edmonton, Canada. He advocates a simple land tax with exemption of improvements such as has been adopted in his own city.

CLEVELAND, F. A. *The federal budget: what the president is trying to do by way of budget making for the national government.* Pro. N. Y. Acad. Pol. Sci., Jan., 1913. Pp. 17.

DAVIDSON, D. *Till fragan om utländsk skuldsättning.* Ek. Tids., No. 10, 1912.

Reviews arguments against a state's placing loans in foreign countries, and concludes that dependence on home capital exclusively would generally lead to invasion of foreign capital in forms other than state loans; for example, private loans at higher rates of interest or investments made by foreigners.

DEORITY, W. A. *Result of three years' experience with the Indiana accounting law.* Public Officials Mag., Oct.-Nov., 1912. Pp. 18.

DICKREITER, H. G. *Steuerpolitisches aus einem Kleinstaate.* Kommunale Praxis, Dec. 21, 1912. Pp. 3.

A study of the financial conditions of Altenberg.

DOLGE, W. *Budgets.* Pacific Municipalities, Oct., 1912. Pp. 4.

ESTRICH, W. A. *Theories of mortgage taxation.* Case and Comment., Dec., 1912. Pp. 6.

FITZ, H. *Wein und Weinstuerer.* Ann. deut. Reichs, Nov. 7, 1912. Pp. 32.

FLORA, F. *Le finanze della guerra.* Rif. Soc., Oct., 1912. Pp. 42.

A study of national policy as to public loans and taxes as a necessary resort for modern nations that engage in war; written apropos of the Italian war.

FROST, T. G. *The federal corporation tax.* Case and Comment., Dec., 1912. Pp. 6.

GARIEL, G. *Le rôle économique des municipalités en suisse.* Réf. Soc., Dec. 16, 1912. Pp. 24.

GEISSE, A. *Della tassa domestici e di alcuni minori tributi locali.* Rif. Soc., July-Aug., Sept., 1912. Pp. 37.

GINTY, J. *Equitable assessments.* Pacific Municipalities, Oct., 1912. Pp. 3.

GOEDSEELS, J. *Les régies allemandes.* Réf. Soc., Oct., 1912. Pp. 6.

Author finds that municipal ownership of water supply, street cars, and gas and electric lighting in German cities is financially successful, as a rule, showing an even larger net profit than privately owned utilities; a result not due to higher rates but to more efficient management.

GOHN, G. *Depreciation of government securities in Germany.* Econ. Journ., Dec., 1912. Pp. 9.

GRAS, N. S. B. *The origin of the national customs-revenue of England.* Quart. Journ. Econ., Nov., 1912. Pp. 43.

Scholarly examination of all that is known concerning the early history of the English customs. Holds that most of the theories and conclusions of such writers as Hall, Dowell, and Stubbs are erroneous or of doubtful validity.

HARRIS, R. V. *Exempted government property in Canadian cities and towns.* Canadian Munic. Journ., Oct., 1912. Pp. 2.

HEPBURN, W. *A defense of the single tax as adopted in Vancouver, B. C.* Canadian Munic. Journ., Oct., 1912. P. 1.

HOMAN, B. *Die erste staatliche direkte Steuer. Ein Beitrag zur europäischen Steuergeschichte.* Ungarische Rundschau, Jahrg. 1, Pp. 41.

INOUE. *Government and the state finances.* Japan Finan. and Econ. Monthly, Nov., 1912. Pp. 3.

JENSEN, A. *Skattreformen of 1912.* Nat. ök. Tids., July-Aug., 1912.

A review of the tax legislation in Denmark during the period 1903-1912, discussing in particular the special features of the tax reform of 1912.

JORDAN, D. S. *Taxing the cost of living.* World's Wk., Jan., 1913. Pp. 9.

How the governments of all civilized nations, by spendthrift expenditures, are saddling the world with interest-bearing debt and thereby are depreciating the value of money. The relation of armies and navies to these debts.

K. *Die Gemeindesteuern der preussischen Städte und grösseren Landgemeinden.* Verwaltung und Statistik, July, 1912. Pp. 3.

KASSON, F. *The system of assessments in Palo Alto.* Pacific Municipalities, Oct., 1912. Pp. 1½.

KATASKA, C. *Government and the state finances.* Japan Finan. and Econ. Monthly, Nov., 1912. Pp. 3.

KATZENSTEIN, I. *Der preussische Staatsschatz und der Reichskriegsschatz.* Jahrb. f. Gesetzg., Jahrg. 36. Pp. 34.

KENNAN, K. K. *The Wisconsin income tax law.* Case and Comment, Dec., 1912. Pp. 7.

KIERSTADT, W. C. *Reform in local taxation by the taxation of land.* Canadian Munic. Journ., Dec., 1912. Pp. 3.

LANSBURGH, A. *Geeignete und ungeeignete Mittel zur Hebung des Kurses der Staatspapiere. II.* Die Bank, Oct., 1912. Pp. 17.

LANSBURGH, A. *Gemischte wirtschaftliche Unternehmung.* Die Bank, Dec., 1912. Pp. 12.

A discussion of the advantages of a kind of partnership between public bodies and private corporations in the ownership and operation of public utilities.

LEROUX-BEAULIEU. *Le budget de la ville de Paris: les services industriels.* L'Econ. Franç., Nov. 16, 1912.

LEVY, R. G. *Les finances des états balkaniques et les bourses européennes.* Rev. d. Deux Mondes, Dec., 1912. Pp. 36.

VON LEYDEN, V. *Agrarverfassung und Grundsteuer in Britisch-Oestindien.* Jahrb. f. Gesetzg., Jahrg. 36. Pp. 58.

LONG, P. V. *The doctrine of excess condemnation.* Pacific Municipalities, Oct., 1912. Pp. 4.

MACLÈRE, C. *Le rapport de M. Dalimier et la discussion à la chambre sur le budget des postes et des télégraphes.* Journ. des Econ., Dec. 15, 1912. Pp. 20.

Author makes use of the defects brought to light in the administration of the posts and telegraphs to argue that these are, after all, not proper functions for the state to undertake.

NORMAND, J. *Les contributions directes et les taxes assimilées à Paris et dans le département de la Seine.* L'Econ. Franç., Nov. 2, 1912.

OSBORNE, A. W. *Taxes levied by Iowa town councils.* City Hall-Midland Municipalities, July, 1912. Pp. 4.

PALGRAVE, R. I. *The proposed land taxes.* Nat. Rev., Nov., 1912. Pp. 8.

PEGARD, P. *Le régime douanier colonial.* Rev. Sci. Pol., Sept.-Oct., 1912. Pp. 18.

PERRIE, J. *System of taxation in force in the province of Alberta.* Canadian Munic. Journ., Oct., 1912. P. 1.

PLEYDELL, A. C. *Tax measures of 1912.* Am. Pol. Sci. Rev., Nov., 1912. Pp. 9.

POLET, G. *Les régies municipales en Belgique et la question des distributions d'eau.* Réf. Soc., Nov., 1912.

Municipal ownership plays a comparatively small role in Belgium, except in the case of water supply. But the water supply is inadequate chiefly because the units are too numerous and unrelated. Large intercommunal undertakings privately organized and financed by public funds recommended.

POST, L. F. *The taxation of land values.* Case and Comment, Dec., 1912. Pp. 3.

POST, L. F. *Taxation in Philadelphia.* Nat. Munic. Rev., Jan., 1913. Pp. 11.

A criticism of Mayor Blankenburg's tax proposals from single-tax point of view.

PRATO, G. *Di alcune recenti teorie sul capitale e sul reddito e delle loro conseguenze tributarie.* Rif. Soc., Nov., 1912. Pp. 49.

RAFFALOVICH, A. *Les régies municipales intéressées en Allemagne.* L'Econ. Franç., Nov. 30, 1912. Pp. 2.

READ, T. T. *China's great problem.* Pop. Sci. Mo., Nov., 1912. Pp. 8.

Cursory criticism of existing sources of revenue, with suggestions for new sources.

REDDICK, G. T. *Trausient merchant and peddler's licenses.* American Municipalities, Dec., 1912. Pp. 4.

REUBER, A. and H. *Bemerkungen zur mathematischen Ausgestaltung der Einkommensteuer in Preussen.* Ann. deut. Reichs, No. 9, 1912. Pp. 3.

RICHARDSON, C. *The economics of highway construction.* Am. City, Jan., 1913. Pp. 3.

The danger of paying for short-lived improvements by long-term bonds. A tax on automobiles and on gasoline advocated as an aid to road maintenance.

ROSS, P. V. *Inheritance taxation.* Case and Comment, Dec., 1912. Pp. 5.

SALEFRANQUE, L. *Etat général et comparatif du régime fiscal de la France.* Journ. Soc. Statist., Dec., 1912. Pp. 11.

SCHWARTZ, I. B. *The single tax as a fiscal policy.* Case and Comment, Dec., 1912. Pp. 6.

SEILER, L. C. *Municipal assessment and fiscal efficiency.* City Club Bull. (Phila.), Oct. 31, 1912. Pp. 12.

A description and criticism of the present methods of assessing real estate in Philadelphia, with suggestions for the adoption of a scientific and efficient system.

SELIGMAN, E. R. A. *Recent tax reforms abroad. II.* Pol. Sci. Quart., Dec., 1912. Pp. 27.

This second article of the series discusses the German reforms of 1909-10, which especially concerned federal finance. Contains a brief history of the unearned increment tax.

SEVIN, L. *Ein Vorschlag zur Reichsbesitzsteuer.* Jahrb. f. Gesetzg., Jahrg. 36. Pp. 25.

SHEPARD, A. G. *Taxes and prosperity.* Case and Comment, Dec., 1912. Pp. 5.

TETZLAFF, O. *Die Finanzen der preussischen Landkreise.* Verwaltung und Statistik, Nov., 1912. Pp. 7.

Summary of an elaborate government report prepared by the author for the fiscal year 1908.

THALBITZER, C. *Vor Betalingsbalance og den udenlandske Gåld.* Nat. øk. Tids., May-June, 1912.

Examination into the administration of public finances in Denmark; the government must change its financial policy or find itself unprepared to meet creditably a financial crisis.

TOENNESEN, M. P. *Bøndernes Skatteansattelse.* Nat. øk. Tids., July-Aug., 1912.

Defends the (Danish) farmers against the charge that they through undervaluing their income escape their just share of taxation.

VIRGILII, F. *Il pedaggio sui marmi di carrara e i suoi effetti finanziari e sociali.* Ref. Soc., Dec., 1912. Pp. 12.

WARREN, G. C. *For financing pavements.* City Hall-Midland Municipalities, Aug., 1912. Pp. 2.

In favor of the method of levying special assessments in use in Utica, N. Y.

WIESINGER, C. *Die Einnahmen des deutschen Reiches aus der Zöllen und Reichsteuern im Rechnungsjahre 1911.* Ann. deut. Reichs, No. 10, 1912. Pp. 22.

WIRH, A. *New Zealand. The country and the war for its government by the people.* Single Tax Rev., Sept.-Oct., 1912.

This number is a special New Zealand number, and is of value for the history of the land tax movement in that country.

WRIGHT, J. W. *Municipal finance.* Accountant, Nov. 9, 1912. Pp. 9.

A useful article on the general financial powers and practices of British municipalities.

YOUNGMAN, A. *Frankfort-on-the-Main: a study in Prussian communal finance.* Quart. Journ. Econ., Nov., 1912. Pp. 52.

Part I of a study of the finances and financial administration of the Prussian municipalities; largely a study of the finances of one city.

ZIMMERMANN, F. W. R. *Warenhaus und Warenhaussteuer.* Zeitschr. f. d. ges. Staatswiss., Jahrg. 68, 1912. Pp. 69.

— *China's financial condition. The Crisp loan and China's credit.* Far Eastern Rev., Oct., 1912. Pp. 12.

— *Finances municipales. Le projet de budget de la ville de Paris pour 1913.* Monde Econ., Dec. 21, 1912. Pp. 4.

— *How France taxes securities.* N. Y. Times Annalist, Jan. 20, 1913.

Beginning with a stamp tax in 1850, it has added transfer and income tax and a new feature is contemplated.

— *Land valuation and taxation.* Land Values, Dec., 1912. Pp. 11. An extended and very unfavorable review of *Taxation of Land Values as It Affects Landowners and Others*, by John Orr. The monthly periodical "Land Values" is the organ of the single-tax propaganda in England.

— *Land values conference in London.* Land Values, Nov., 1912. Pp. 14.

A digest of the proceedings of a conference to promote the taxation of land values held in Westminster, October 7, 1912.

— *A premium on tax lying.* City Hall-Midland Municipalities, Sept., 1912. Pp. 3.

A vigorous attack on the "Smith Law" in Ohio, "a grotesque and desperate expedient to enforce that hoary iniquity, the general property tax."

— ; *Statement of arguments favoring a national budget.* The Nation's Business, Nov. 8, 1912. Pp. 2.

The organ of the Chamber of Commerce of the United States of America features the report of the Commission on Economy and

Efficiency, giving a list of the newspapers supporting the reform and the opinion of many well-known public men.

— *A successful budget-method protest, illustrated by extracts from the report of the bureau of street cleaning, Richmond Borough, New York city.* Engg. News, Dec. 26, 1912. Pp. 6.

An interesting and valuable statement of efforts to promote efficiency in the street cleaning department of the Borough of Richmond, New York city. The "protest" was against a highly segregated budget. In 1913 "appropriations for the Bureau of Highways, Sewers and Street Cleaning will be classified functionally and will be based on work quantities to be performed in each quarter of the year and on average unit and item costs."

— *L'enceinte de Paris construite par les fermiers généraux et la perception des droits d'octroi de la ville (1783-1791).* Société de l'Historie de Paris et de l'Île de France, Bulletin, Année 39, 1912. Pp. 34.

— *L'exploitation du monopole des tabacs.* L'Econ. Franç., Oct. 12, 1912.

— *La dette publique ottomane.* Mouv. Econ., Nov., 1912. Pp. 2.

— *Finanz- und Steuerverhältnisse in deutschen Gemeinden im Jahre 1911 bzw. 1911/12.* Kommunale Praxis, Sept. 14, 1912. Pp. 23.

An elaborate and useful presentation of the financial statistics of 594 German cities.

— *Die Reform der Steuergesetze des Jahres 1909. Gesetzvorlage über Abänderung und Ergänzung der Gesetzartikel VI, VII, VIII, IX, X und XI, und über hiemit Verbundene Verfügungen, samt Motivenbericht.* Volkswirtsch. Mitteilungen aus Ungarn, July, 1912. Pp. 4.

— *Der Schuldenstand der preussischen Städte und grösseren Landgemeinden.* Verwaltung und Statistik, Aug., 1912. Pp. 2.

— *Kritische Gedanken zu den Preussischen Einkommen- und Ergänzung- Steuer- Gesetzentwürfen.* Verwaltung und Statistik, Nov., 1912. Pp. 2.

Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

BARRAULT, H. E. *Les doctrines de Cournot sur le commerce international.* Revue d'Hist. Doct. Econ., Nos. 2-3, 1912. Pp. 15.

A criticism of Cournot's doctrine, defending him against the attacks of Edgeworth, Bastable, and others, and placing his protectionism on the same ground with List's.

BELLET, D. *Le protectionnisme honneur et les indications d'origine.* Journ. des Econ., Nov. 15, 1912.

An account of the movements among producers, like the movement for the "Made in Germany" label, intended to prevent the sale of foreign goods without giving formal protection.

DE BRAY, A. J. *La politique commerciale de l'Angleterre.* Rev. Econ. Canadienne, Sept.-Oct., 1912.

An historical sketch showing that England's commercial policy has been based on her economic interest rather than on abstract principles, and a statement of reasons why her present interest demands the continuance of present policy.

EINAUDI, L. and RIMONI, P. *Polemizzando coi siderurgici.* Rif. Soc., Dec., 1912. Pp. 40.

An attack upon the attempt of the Italian steel makers to secure tariff and other favors from the Parliament.

GRAS, N. S. B. *The origin of the national customs revenue of England.* Quart. Journ. Econ., Nov., 1912. Pp. 43.

A careful historical account of the historical origin of the English customs system, covering the years from 1050-1350.

HERZBERG, HENRY. *Fallacies of protection.* No. Am. Rev., Nov., 1912.

A revamping of the conventional high-price special-privilege arguments against protection.

HOMAN, J. V. *Russian-American commercial relations.* Pol. Sci. Quart., Dec., 1912.

A careful study of present trade relations, which shows that the termination of the treaty with Russia is likely to work serious injury to our trade, and that Russia is likely to welcome the opportunity to put hindrance in the way of imports from the United States.

LEENER, G. *L'unification des régimes douaniers.* Rev. Econ. Intern., Oct., 1912. Pp. 34.

A plea for international unification of tariffs, with a consideration of the difficulties and objections.

POSR, C. J. *The tariff tax.* Everybody's, Nov., 1912.

Three pages of detailed statement of export prices that are lower than foreign prices, and of instances showing special privilege in the Payne-Aldrich law.

POWELL, G. H. *Conservatism and free trade.* Fortn. Rev., Nov., 1912.

Pleads for the abandonment of protection as the condition precedent to making the conservatives an effective opposition party in England.

RAJALOVICH, A. *Frederic List et la polémique autour de ses idées en 1912.* Journ. des Econ., Dec., 1912. Pp. 8.

A brief historical sketch of List's life and doctrines, invoking the authority of the apostle of protection against present day protection in Germany.

SMETS, P. E. *La commerce extérieur des Etats-Unis.* Rev. Econ. Intern., Nov., 1912. Pp. 30.

A consideration of the foreign trade and foreign debt of the United States in their relation to the European market.

— *Tariff reform in its application to India.* Economist, Dec. 7, 1912.

Insurance and Pensions

(Abstracts by William F. Gephart)

BELLOM, M. *La loi anglaise d'assurance sociale de 1911.* *Journ. des Econ.*, Oct. 15, Dec. 15, 1912.

The third critical article on the English National Insurance act, treating of postal funds, administration of the law, status of existing societies, separate funds for Ireland, Scotland, and Wales, and influence of age at entry.

BELLOM, M. *Les résultats de l'assurance sociale en allemande.* *L'Econ.* Franc., Nov. 9, 1912.

An instructive survey of twenty-five years of social insurance in Germany. The writer thinks the obligatory principle should be secured on a plan of greater equity of costs among employers, employees, and the state.

BELLOM, M. *La prévoyance facultative en matière d'invalidité et de vieillesse.* *L'Econ.* Franc., Oct. 12, 1912.

The results of the combinations of insurance schemes which the department of old-age pensions in France permits becomes quite clear when they are illustrated by numerous examples. Shows how these combinations may be related to the previous measures of April 5, 1910 and February 27, 1912, covering pensions for industrial and agricultural working women.

BRAUER, F. *Die Wirkungen der Feuerversicherungs-Kartelle auf die Prämienhöhe.* *Versicherungs-Wissenschaft*, Nov., 1912.

Whatever agreements there are among fire insurance companies have arisen as a necessity, and the public has benefited from them although such agreements leave much to be desired. The associations are not guilty of the numerous charges brought against them, such as inflicting high rates, taking great profits, or unwholesome influence on legislation.

BROECKER. *Der VII. internationale Kongress für Versicherungs- Wissenschaft zu Amsterdam.* *Zeitschr. f. d. ges. Versicherungsw.*, Nov., 1912.

Full report on the Amsterdam meeting of International Congress for the Scientific Study of Insurance. Important topics discussed were the various plans and regulations of social insurance, mortality rates since 1800, and gross premium calculations.

DAWSON, W. H. *Social insurance in England and Germany—A comparison.* *Fortn. Rev.*, Aug., 1912.

ENSELL, E. H. *Bank service pensions.* *Bankers' Mag.*, Nov., 1912.

Fox, H. H. *A reply to Mr. Rubinow.* *Survey*, Dec. 21, 1912.

Holds that Mr. Rubinow's objections are not final since provision is made for any desirable changes in the plan. Brewery workers do not change employments. Mr. Fox is secretary of the Brewers' Association, and favors the plan.

GHULEA, N. *Die neue einheitliche Sozialversicherung in Rumänien.* *Zeitschr. f. d. ges. Versicherungsw.*, Nov., 1912.

GILLESPIE, H. B. *Provides insurance for its men.* Am. Employer, Dec., 1912.

The Michigan Stove Co. of Detroit, insured its employees under the group plan, whereby there is no medical examination. The company pays the premium. The plan is satisfactory.

HENDRICK, B. J. *Insurance for workingmen.* McClure, Dec., 1912.

A popular description of the workingmen's compensation law of Washington.

HUNTER, ARTHUR. *The medico-actuarial investigation of the mortality of American and Canadian life assurance companies.* Journ. Inst. Actuaries, Oct., 1912.

The results of an initial investigation, preliminary to the investigation which will result in a new American mortality table. Forty-three companies representing 93 per cent of the total insurance old-line insurance in force contributed to the investigation. The actual deaths were 81 per cent of the expected, according to the select table used in the specialized investigation, but the committee states that this should not be accepted as a basis for rate making.

LEFEBVRE, C. *L'exploitation légale de l'épargne.* Sept. 10, 1912. Pp. 9.

The tontine principle is a hazardous plan, due to possible unexpected losses or failures in management whereby the savings set aside may be lost.

LENNE, PAUL. *Beiträge zur Lehre vom Versicherungsgeschäft für fremde Rechnung.* Zeitschr. f. d. ges. Versicherungsw., Nov., 1912.

A discussion of the laws in regard to insuring in one's name the interests of another party.

RICHARD, P. J. *Les sociétés à forme tontinière.* Journ. des Econ., Oct. 15, 1912.

A review of the operations of the working and theory of the tontine plan among French mutual societies.

RUBINOW, I. M. *The pension plan for the brewing industry.* Survey, Dec. 21, 1912.

The plan was once rejected by the workers but is now resubmitted. Employers and employees contribute to the fund not only for old age but also for accidents. The writer objects to the latter purpose being included, for the states are providing for accidents. He points out other defects, such as no provision for workers who leave the industry after having paid into the fund.

THORSEN, C. *Revisionen af den franske Alderdomsforsikringslov.* Nat. ök. Tids., Sept.-Oct., 1912.

An account of the French old-age pension law enacted in April, 1910, and operative July 1, 1911, but which met with such general opposition and distrust that a revision became necessary, and even now is not assured of success. The writer attributes this mainly to its compulsory contributory features which the French resent.

WEIGMANN, M. *L'assicurazione contre la disoccupazione in Svizzera.* Rif. Soc., Oct., 1912. Pp. 9.

A review of Swiss cantonal and municipal insurance against unemployment.

ZAHN, Dr. F. *Belastung durch die deutsche Arbeitversicherung*. Versicherungs-Wissenschaft, Nov., 1912.

The author attempts to discover the effects of the German working-man's insurance plan upon employer, employee, and society, but concludes that the effects are decidedly of a non-material and monetary character.

— — — *American Telephone & Telegraph Company's pension system*. Elec. World, Nov. 16, 1912.

This company has set aside a ten million dollar relief fund for old age or disablement. Such acts should be viewed in the light of compulsory state laws for such protection.

— — — *As to buying stock in new companies*. Life Ins. Independent, Oct., 1912.

Since 1901 there has been an increase from 86 to 253 life insurance companies. There is little prospect that most of them will ever return adequate dividends.

— — — *Development and organization of mutual aid societies in France*. Bull. Bur. Econ. & Soc. Intelligence, Sept., 1912.

Mutual aid societies have been popular in France; chiefly found in the rural districts, but are increasing in the cities. They are organized for accidents, old age, maternity, agricultural credit, and a variety of purposes. These two articles give an excellent discussion of the origin and working of such societies, with statistics of membership, fees, and other data.

Population and Migration

(Abstracts by William B. Bailey)

BUNLE, H. *L'émigration des peuples jaunes*. Bull. Stat. Gén., Oct., 1912. Pp. 33.

A computation has been made of the number of Chinese and Japanese emigrants during the past few years, together with the present number of these nationalities in other countries. Contains brief studies of the causes which have led to emigration and the treatment in countries to which they have gone.

COTL, L. J. *The relation of eugenics to euthenics*. Pop. Sci. Mo., Nov., 1912. Pp. 8.

The point at issue is the relative influence of heredity and environment in the development of the human race. The two methods may and should work in harmony, securing mutual advantage through intelligent coöperation.

DUPREZ, L. *L'émigration temporaire des ouvriers agricoles en France*. Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 5.

About 40,000 agricultural laborers come into France annually for

temporary work. Committees have been instituted in several cities for the protection of temporary immigrants.

GEMUND, W. *Statistische Ergebnisse zum Thema: Hochsommerklima und Säuglingsterblichkeit.* Zeitschr. f. Socialwiss., Nov., 1912. Pp. 5.

The summer of 1911 was extremely warm and was reflected in an increase of mortality in Prussia, more pronounced among infants than adults, and in the cities than in the rural districts.

GINI, C. *Contributi statistici di problemi dell'eugenica.* Riv. Ital. di Sociologia, May-Aug., 1912. Pp. 105.

By utilizing statistics of various countries, the author concludes that the youth of the wife and maintenance of a considerable interval between births are a means of insuring an improved quality of population.

HERSCH, L. *L'émigration des Européens aux Etats-Unis au point de vue professionnel.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 58.

An article of very great value in studying the variation in occupation of the immigrants to this country from 1899 to 1911. These groups are studied by nationality and seasons. The article deserves careful study.

HOAGLAND, H. E. *The movement of rural population in Illinois.* Journ. Pol. Econ., Nov., 1912. Pp. 15.

The principal causes advanced for the decrease of the farm population and the increase of the village population are the increase in the use of farm machinery, the development of the building of good roads, and of rural delivery.

von HOFFMANN, G. *L'immigration et le chômage.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 18.

KLOTZ, M. *La commission de la dépopulation.* L'Econ. Franç., Nov. 30, Dec. 7, 1912. Pp. 3, 3.

An address delivered on November 23, 1912, by the Minister of Finance at the opening of the extra-Parliamentary Commission charged with studying the national social and fiscal questions relative to the depopulation of France, and also the means to remedy this.

ORENSTEIN, M. S. *The Servo-Croats of Manhattan.* Survey, Dec. 7, 1912. Pp. 11.

A study of 674 Servo-Croats in the west side of New York city. Of particular interest since it is almost the only intensive study which has been made of this group in the United States.

OUALID, W. *L'enquête de la commission de l'immigration et ses résultats.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 29.

OUALID, W. *L'immigration et l'émigration de la main-d'œuvre.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 10.

A statistical study of Great Britain together with the occupations of aliens in certain sections of England.

PAGE, T. W. *Some economic aspects of immigration before 1780. I.* Journ. Pol. Econ., Dec., 1912. Pp. 18.

Considers the probable number of convicts and paupers shipped to the United States by foreign countries between 1830 and 1870, together with a short discussion of the extent of pauperism in the United States to be credited to foreign immigration. Most of the sources consulted are congressional reports or *Niles' Register*.

PARKER, G. *British land and British emigration.* Nineteenth Cent., Nov., 1912.

PASTERIS, E. *Una missione sul Reno.* Riv. Internazionale, Aug., 1912. Pp. 33.

Observations concerning Italian emigrants in Switzerland and southern Germany.

REED, A. C. *Going through Ellis Island.* Pop. Sci. Mo., Jan., 1913. Pp. 15.

Describes in considerable detail the examination of the immigrants, and particularly those who are suspected of disease or physical defect.

ROBERTS, P. *The Bulgarian in America.* Survey, Nov. 23, 1912. Pp. 3.

A short but comprehensive survey of the number, distribution, and occupation of the Bulgarians in the United States. It is written by a recognized authority and contains a short picture of their social condition.

SANGRO Y ROS DE OLANO, P. *L'émigration et le problème du chômage.* Bull. de l'Assoc. Intern. pour la Lutte contre le Chômage, July-Sept., 1912. Pp. 12.

Spain is much concerned over emigration since there is a scarcity of population in that country at present. The article contains a number of statistical tables showing the number of persons departing from and returning to the country together with their sex, age, and country of destination.

SCHULZYE, E. *Die Einwanderungspolitik der Vereinigten Staaten und Kanadas.* Blätter f. Vergleich. Rechtswis. Volkswirtsch., Nov., Dec., 1912. Pp. 4, 5.

The differences in the nationality of the immigrants to the United States and Canada are clearly stated, together with the attempts being made by Canada to attract immigrants from Great Britain and the countries of northwestern Europe. An article with good historical perspective.

TRAP, C. *De russiske Jøder: København.* Nat. øk. Tids., July-Aug., 1912.

A statistical survey of the Russian Jews who have settled in Copenhagen during the last ten years.

— *La dépopulation de la France.* L'Impôt Unique, Dec. 1, 1912. Pp. 7.

A somewhat superficial study of the causes of depopulation in France and proposing as remedy the adoption of the single tax.

— *Mouvement de la population.—France 1907 à 1910.* Bull. Stat. Gén., Oct., 1912. Pp. 6.

A comprehensive article covering marriage, divorce, birth, and death.

— *Die Dichtigkeit der Kinderbevölkerung in Glasgow.* Zeitschr. f. Socialwiss., Nov., 1912.

— *Die Säuglingssterblichkeit in deutschen Großstädten 1910 und 1911.* Zeitschr. f. Socialwiss., Nov., 1912. Pp. 5.

A review of a publication of the statistical bureau of the city of Munich, which compared the infant mortality in 26 German cities for the years 1910 and 1911. The connection between rate of mortality and temperature is brought out clearly.

Pauperism and Charities

(Abstracts by Frank D. Watson)

DUCE DE BERNONVILLE, L. *Les institutions d'assistance publique en Angleterre et en Allemagne.* Journ. Soc. Statist., July, 1912.

MARTIN-SAINT-LEON. *L'œuvre sociale du général Booth.* Réf. Soc., Nov., 1912. Pp. 10.

An appreciation of Booth and account of the work of the Salvation Army.

OSBORN, C. *The administration of the poor law.* Char. Organ Rev., Nov., 1912. Pp. 15.

The forty-first annual report of the Local Government Board on the administration of the poor law for 1911-1912 shows a decrease in recipients of relief. This reduction is temporary and there are hints of approaching difficulties.

PAYEN, E. *Les enfants assistés: les imperfections du service.* L'Econ. Franc., Oct. 5, 1912. P. 1.

The inspections are insufficient; with the result that aid is given to the greatest number possible, a result by no means socially valuable.

Socialism

BAUMANN, A. A. *The Tory party and state socialism.* Fortn. Rev., May, 1912.

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Housing

(Abstracts by James Ford)

CETRY, H. *Les habitations ouvrières du Cercle Saint-Joseph de Mulhouse.* Mouv. Social, July, 1912. Pp. 3.

Description of methods of a successful building association founded in 1890.

COMEY, A. C. *Maximum building height regulation.* Landscape Architecture, Oct., 1912. Pp. 6.

Types of legal regulation in American cities.

COMSTOCK, A. P. *Chicago housing conditions. VI. The problem of the negro.* Am. Journ. Sociol., Sept., 1912. Pp. 16.

Thorough statistical study of four districts.

DIXON, S. G. *The sanitary building site.* Real Estate Mag., Oct., 1912. Pp. 4.

FUCHS, A. J. *Der Wohnungsfürsorgefonds.* Zeitschr. Volkswirtsch., XXI, 3, 1912.

Describes cheap public credit to housing schemes in Germany and Austria.

HORSEALL, T. C. *The "continuous" inspection of small dwellings in Germany.* Char. Organ. Rev. (London), Oct., 1912. Pp. 8.

Especial reference to Hesse.

IHLER, J. *Housing at the Los Angeles conference.* Nat. Munic. Rev., Jan., 1913. Pp. 8.

JONES, T. J. *The alley homes of Washington.* Survey, Oct. 19, 1912.

Alley death-rates and government action.

JUILLERAT, P. *La lutte contre le logement malsain.* Réf. Soc., Nov., 1913. Pp. 7.

Notes the decrease in tuberculosis mortality in Paris as dwellings with dark rooms are razed. Attempts computation of value to the city of lives saved.

MALLALIEU, W. V. *A Washington alley.* Survey, Oct. 19, 1912.

Vivid description of Snow's Court and its occupants.

RISLER, G. *Les habitations à bon marché. I, II, III.* Réf. Soc., Aug., Sept., 1912. Pp. 21, 24.

Law concerning small holdings in France. Societies for improved housing in France and their sources of capital. Tax exemption.

TAYLOR, G. R. *Satellite cities. II. Pullman. III. Norwood and Oakley.* Survey, Nov. 2, Dec. 7, 1912. Pp. 14, 14.

III. Industrial decentralization unaccompanied by residential decentralization at Cincinnati. The Schmidlapp housing experiment.

RENDU, A. *La construction et le gestion des habitations populaires.* Réf. Soc., Dec., 1912. Pp. 23.

Opposes municipal housing for Paris.

— *Housing and town planning.* Surveying and Housing Wld., Jan. 11, 1913. Pp. 2.

Annual report of the British Social Government Board.

— *The housing problem and its solution.* Surveying and Housing Wld., Jan. 11, 1913. Pp. 4.

Extracts from reports of Dr. J. T. C. Nash, medical officer of Norfolk County, England.

— *Thorney rural housing scheme.* Surveying and Housing Wld., Dec. 14, 1912. Pp. 4.

Describes "a self-supporting housing scheme . . . carried out by the Thorney Rural District Council," England.

— *Housing the people.* Co-partnership, Jan., 1913. P. 1.

"A chronological record of progress" of improved housing in England.

NOTES

The Managing Editor regrets that a reply by Professor Fisher to Professor Seager's article in the December REVIEW on "The Impatience Theory of Interest," has come in too late to be inserted in this issue. It will appear in the June number of the REVIEW.

The following table shows the distribution of the membership of the American Economic Association on December 20, 1912, compared with that of April 20, 1911.

	1911	1912		1911	1912
	Apr. 20	Dec. 20		Apr. 20	Dec. 20
<i>N. E. States</i>			<i>Central States</i>		
Maine	14	18	Ohio	63	93
New Hampshire	15	16	Michigan	33	46
Vermont	5	6	Indiana	26	39
Massachusetts	267	352	Illinois	119	148
Rhode Island.....	16	22	Wisconsin	51	60
Connecticut	51	79	Minnesota	28	38
	368	493	Iowa	24	26
			Missouri	59	70
				403	520
<i>Middle States</i>			<i>Western States</i>		
New York	426	580	Arizona	2	2
New Jersey	43	75	Idaho	2	5
Pennsylvania	124	180	Nebraska	14	21
Delaware		6	Utah	6	7
Maryland	36	35	Colorado	15	19
Dist. of Columbia.....	85	105	Kansas	6	11
	714	981	New Mexico	1	3
			Montana	7	9
<i>Southern States</i>			No. Dakota	6	9
West Virginia	7	6	So. Dakota	4	4
Virginia	12	17	Wyoming	1	
No. Carolina	8	9		64	90
So. Carolina	4	4	<i>Pacific States</i>		
Georgia	11	15	Washington	14	21
Florida	7	9	Oregon	10	12
Tennessee	9	14	California	46	72
Kentucky	6	13		70	105
Alabama	5	7			
Arkansas	3	2	<i>Canada</i>	21	42
Texas	16	20	<i>Other Countries</i>	66	86
Louisiana	18	19			
Mississippi	3	4			
Oklahoma	2	8			
	111	147	Total	1817	2464

In addition to the above membership there were in December, 1912, 251 subscribers, making a total of 2715.

The supply of the *Handbook* of the American Economic Association for 1911 is entirely exhausted. There is an occasional request for a copy to complete a set for binding. If anyone has a copy of the *Handbook* for that year which he does not intend to bind, or does not need for other purposes, it would be a favor to the Association if he would send it to the secretary (T. N. Carver, Cambridge, Mass.), who will pay twenty-five cents a copy.

The fourteenth session of the Institut International de Statistique will be held at Vienna during the week of September 8, 1913.

An International Customs Congress is to be held in Paris during the month of May at the instigation of the French government. Although it may be regarded as a continuation of the congress of 1900, it is to be more definite in scope, and discussion will be limited to five questions: (1) The desirability of establishing an International Bureau of Commercial Statistics; (2) regulations for commercial travelers and the treatment of samples; (3) means for dispensing with payment of duty in the case of conditional imports; (4) the desirability of having customs litigation referred to expert bodies, and the character of such bodies; and (5) the advisability of concluding an international agreement for the purpose of adopting a uniform definition of gross and net weights for assessing duty.

A study of European agricultural finance is to be undertaken by a commission of the Southern Commercial Congress which will sail on April 26 and will spend three months in visiting Naples, Rome, Florence, Bologna, Milan, Budapest, Vienna, Munich, Dresden, Berlin, Cologne, Rotterdam, Brussels, Paris, London, Dublin, Cork, Queenstown, Copenhagen, Stockholm, Berne, St. Petersburg, and the capitals of the Balkan countries. Each state is invited to send two or more delegates; there will be representatives of national agricultural organizations; and Canadian provinces have petitioned for representation.

During the past year there has been deposited in the Library of Congress the library of the National Monetary Commission, consisting of nearly 2300 volumes and over 1500 pamphlets; the library of the Tariff Board, 2335 volumes and 1490 pamphlets; and also 40 volumes of ledgers and account books of Edward Dixon, a merchant at Port Royal, Virginia, during the years 1743-1796. The latter illustrate current prices and movement of trade. Another accession of 56 volumes is the *Proceedings of the Anthracite Coal Strike Commis-*

sion of 1903. The library has engaged in a special effort to make a collection of the reports of large industrial corporations including the briefs and records of cases in which industrial corporations have been dissolved by the courts.

The library and reference department established in New York by the American Bankers' Association in November, 1911, is growing rapidly in extent and usefulness. In the acquisition of material, banking information is sought rather than a collection covering the broad field of finance. Pamphlets, clippings, magazine articles, etc. are loaned through the mails to all parts of the country. Proceedings of the national and of state bankers' associations are on file and also government documents, state bank reports, bound financial journals and general reference books.

Bulletin No. 286, of the University of Texas (June 22, 1912) contains the proceedings of the first annual meeting of the Texas Applied Economics Club, grouped under the title *Some Corporation and Taxation Problems of the State* (Professor L. H. Haney, editor, University of Texas, Austin, pp. 146). The papers are in part by students and in part by officials in public life, and collectively represent a successful attempt to interest university students seriously and effectively in the economic problems of their own state.

The awards for the Hart Schaffner & Marx prizes for 1912 have been announced as follows: In Class A: First prize of \$1000, to Albert H. Leake, *Industrial Education, its Problems, Methods, and Dangers*; Second prize of \$500, to Harry Edwin Smith, *The United States Federal Internal Tax History from 1861 to 1871*; and Honorable Mention to Glover D. Hancock, *History of the National Banking System in the United States*. In Class B no papers were deemed worthy of award.

The Committee for Rural Economy of the University of Oxford has appointed Mr. C. S. Orwin, director of the Institute for Research in Agricultural Economics. The Board of Agriculture and Fisheries and the Development Commission have coöperated with the university in forming this institute.

Le Bureau de la Société Belge d'Economie Sociale, at its October meeting, elected as president for the ensuing year M. Ch. de Lannoy, professor at the University of Ghent, and also conferred upon M. Maurice Damoisaux the title of *vice-président*, and upon M. Henry Carton de Wiart the title of *président d'honneur*.

The department of social economics of the London Municipal Society (33, Tothill Street, Westminster, S. W.) is issuing a series of *Statistical and other Memoranda on Political and Social Questions of the Day* at a uniform price of one shilling. Typical recent titles are, "The Rise and Fall of Wages and the Cost of Living," "Numbers and Values of Houses in the United Kingdom," "The Amount, Growth and Distribution of Capital." The statistics published are largely abstracted from official sources, although the results of individual analyses and estimates are also used. The evident purpose is to supply ammunition for the anti-socialist campaign.

Gustav Fischer announces the publication, beginning in January, 1913, of "Weltwirtschaftliches Archiv," edited by Dr. Bernhard Harms and devoted to general and special economic problems. It will appear in quarterly numbers, the price for two numbers being 20 marks. (Verlag von Gustav Fischer, Jena.)

The "Jahrbücher für Nationalökonomie und Statistik" has published an index (*Generalregister*) for volumes 79-95, covering the years 1901-1910 (pp. 213).

A new quarterly whose aim is to record the international proletariat movement and the chief political events which accompany it is entitled "Internationales Jahrbuch für Politik und Arbeiterbewegung" (Buchhandlung Vorwärts, Paul Singer, Berlin.)

Appointments and Resignations.

Mr. Roger W. Babson is now abroad studying economic conditions.

Professor W. B. Bailey, of Yale University, has been chosen agent of the Organized Charities Association of New Haven, Conn.

Dr. James L. Deming of New Haven, Connecticut, has been appointed acting associate professor of sociology at the State University of Iowa for the second semester.

Mr. E. H. Downey has resigned his position at Kenyon College to become chief statistician of the Industrial Commission of Wisconsin.

Dr. Roland P. Falkner has been appointed a member of the Joint Land Commission for the Panama Canal Zone. His address will be Ancon, Canal Zone.

Professor Willard C. Fisher has resigned his position at Wesleyan University.

Dr. R. F. Foerster is chairman of the department of social ethics at Harvard University.

Mr. Frederick B. Garver has been appointed an instructor in the department of political economy at the University of Chicago.

Professor John H. Gray returned in February to his academic duties in the University of Minnesota, upon the completion of the investigation which he has been conducting for the National Civic Federation of New York.

Dr. A. N. Holcombe has been appointed an assistant professor of government in Harvard University.

Mr. Howard A. Hubbard has been appointed to an instructorship in economics at the State University of Arizona.

Mr. E. O. Merehant, formerly engaged on work for the Waterways Commission, has been made a special agent in the federal Bureau of Corporations.

Mr. Stephen I. Miller, of the Polytechnic High School, Los Angeles, has been appointed instructor in economics at Leland Stanford Jr. University.

Professor Francis G. Peabody has retired from teaching in Harvard University after thirty-two years of service. During the spring he will lecture in Japan upon American ways of dealing with social problems.

Professor Paul S. Peirce, of the State University of Iowa, has recently been appointed chairman of the state Child Labor Committee.

Mr. Charles E. Persons has been appointed instructor in economics and sociology at Washington University for the second semester.

Dr. E. E. Pratt, of New York University, has been engaged by the Merchants' Association of New York city to take charge of its newly established Industrial Bureau.

Mr. I. L. Sharfman has been appointed instructor in economics at the University of Michigan for the second semester.

Dr. C. W. A. Veditz, formerly engaged with the Tariff Board as chief examiner, has been made dean of the College of Political Science in George Washington University, Dr. H. Parker Willis having resigned the position upon becoming managing editor of the New York "Journal of Commerce."

At Princeton University, the department of history, politics, and economics has been divided into two parts, the department of economics being separately constituted with Professor Fetter at its head.

CORRESPONDENCE BETWEEN PROFESSOR WILLARD C.
FISHER AND PRESIDENT SHANKLIN.

Wesleyan University, President's Office,
Middletown, Conn., January 27, 1913.

My Dear Professor Fisher:—The press far and wide contains articles relative to remarks in reference to the churches of the country reputed to have been uttered by you in a recent address in Hartford. I desire to know whether or not you have been correctly reported. If you have been incorrectly reported, will you please give me an exact statement of what you did say?

Since yours,
WILLIAM ARNOLD SHANKLIN

Wesleyan University, Middletown, Conn.,
Economics and Social Science,
January 27, 1913.

My Dear Dr. Shanklin:—In reply to your letter, just received, I would say that the report of my remarks before The Get Together Club in Hartford last Wednesday evening was substantially misleading. Partly by the omission of qualifying statements, which made the setting and shaped the interpretation, partly by ascribing to me words and statements which were not mine at all, and, perhaps, partly by the striking headlines, which raised brief incidental remarks into the prominence of the principal theme, the original report, upon which apparently many newspaper quotations and comments have been based was—I should judge—decidedly unfair. This judgment of mine is confirmed in some degree at least by the fact that the paper in which the report appeared was constrained by criticism in Hartford to offer me an opportunity to make corrections. There was, however, a large underlying element of truth in the report. I did not say that I would "throw Sunday wide open", nor anything else of closely similar meaning. But I did say that I would allow very great freedom of Sunday observance, allowing a man pretty nearly anything that did not disturb the religious or other use of the day by others. I did say that I saw no religious inconsistency in a man's having an "uproariously good time" on Sunday; but I added that there should be no disturbance of religious or other uses of the day by others. I did say that I would, or that "I believe that I would" close up the churches temporarily as an experiment. But I stated my reasons with emphasis, because so many good religious people have come to think of church going as a great part or the whole of religious duty, and because, if there were no churches open for a time, these people would be constrained to turn to more important religious duties, of kindly service and the like. Just here I quoted the declaration of James as to the meaning of religion pure and undefiled.

The above will perhaps enable you to judge for yourself as to

the degree of accuracy with which I was reported; but, for a slight amplification of what I have just written, I am enclosing a copy of a letter¹ which I sent in correction of the first report and which was printed in the paper first reporting me in its issue of last Saturday morning, January 25.

Of course, not even all of what I am now placing at your disposal can make entirely clear my general attitude as to Sunday observance;

¹ This letter is as follows:

To the Editor of The Courant:—

The developments of the day make it desirable that you print more about my Wednesday evening address before the Get-Together Club than the few words you asked for last evening. Friends and others speak and write to me in great variety of emotions; quotations have started their run through the general press; and my poor remarks will be made the subject of pulpit discussion. I spoke with deliberate seriousness, just as I thought and have thought for years, and I have not the least wish to qualify what I have said; but the surprising prominence that has come to my remarks through your paper makes it worth while that interested persons should know both what I said and, in part at least, why I said it.

I have always gone regularly to church and considered myself essentially a religious man, and I spoke in the interest of true religion. But my understanding of religion and religious duty is not, apparently, the most widely prevalent one. There is no manner of doubt that, according to the lives of most people in our time and community, attendance at church is a large part of religious duty, perhaps the chief part; while the lives of not a few imply that it is the full duty. Now, my notion is that attendance at church, at so-called religious "services," is of very slight and subordinate importance, of no importance whatever except as a means to something else.

In this, as in all other matters of religious, moral and social principle, I make large use of the Bible; and it will be worth the while of my critics to look through their Bibles with care before they reject my statements and denounce me. "He hath shewed thee, O man, what is good; and what doth the Lord require of thee, but to do justly, and to love mercy, and to walk humbly with thy God?" "Pure religion and undefiled before our God and Father is this, to visit the fatherless and widows in their affliction, and to keep himself unspotted from the world." Nothing here, and very little elsewhere, about attendance at formal religious "services." Yet we all knew men and women who consider themselves, as their neighbors, or at least most of them consider them, religious people, just because they go regularly to church, although they neither do justly, love mercy, visit the fatherless and widows in their affliction, walk humbly with God, nor keep themselves unspotted from the world.

Of course, there is a natural human tendency in all this. Notoriously the militiamen, especially the captain, considers himself a warrior; but few others do, unless he is something more than a mere militiaman. And the error of his pretensions is evident upon a little thought.

Of course, militia drill has its place and justification but not as full substitute, or a large substitute, for military "service." What would we say of men who professed a zeal for military service in a country where hard and dangerous fighting was to be done on every hand, and who yet limited their military "service" to weekly dress parades, or in closer symbolism, weekly military concerts, where, in all possible splendor of buttons, braid and shining metal, they listened to the rattle of drums and the blast of bugle charge, then went back to the quiet and safe enjoyment of their homes? Certainly no warriors these. If dress parades and military concerts were abolished, they might cease to call themselves soldiers or go to war.

but it is probably quite enough to make you to see how and in what light I stood last Wednesday evening. And that, I am sure, is all of your present want.

Very sincerely yours,

WILLARD C. FISHER

Wesleyan University, President's Office,
Middletown, Conn., January 27, 1913.

My Dear Professor Fisher:—Your letter of this date is just received. Even after consideration of your explanation of your position, I find it difficult to believe that any one with a just appreciation of the work which the churches have done and are doing for the religious and moral life of the community could seriously propose the closing of the

I have never condemned church-going, never even in my own mind, except as it takes the place of something more important. A good part of those who do justly, love mercy, visit the fatherless and widows in their afflictions, and keep themselves unspotted from the world, find that reverent attendance at church is a great aid to a humble walk with God. But it is too obvious for proof that in the minds, as in the lives of many, mere going to church "service" is taken for a good portion of religious duty, and this, too, by people whose impulses and instincts are genuinely religious. And my thought has been for a long while that, if such people of true religious impulses were shut off for a time—whether for a few years or for a shorter period is not the main point—from church-going, they would turn into the much important duties, duties of mercy, kindness, sacrifice, and the like, for the help of brother man, duties, these, which are recognized more or less, but are commonly thought of as aside from religion, whereas they are the very heart of religion, the Christian religion at least, so far as the relation of man to man is concerned. "Bear ye, one another's burdens, and so fulfil the law of Christ." "For the whole law is fulfilled in one word, even in this, Thou shalt love thy neighbor as thyself." "Owe no man anything, save to love one another; for he that loveth his neighbor hath fulfilled the law."

As to the "uproarious good time" on Sunday, I said emphatically that I would not allow anybody's Sunday practices to disturb others. As to the suggestion that there may as well be a day of general uproar and tumult, that is none of mine. I have even sympathized with friends, living on good roads in the country, who protest against the unbroken succession of toots, blasts, screams, and other more modern noises which come from the autos of good religious people—among others—who, having done their religious duty at "divine service" in the morning, make the country-side hideous in the afternoon.

Suffice it to say further as to noise and quiet on Sundays and in religion that this thought of Sunday as necessarily to be kept quiet because religion must be solemn silence, all that is a modern and narrow development. All religious people who have added to their duty of church-going a fair attention to the Scriptures, will recall how commonly "shouting" and "loud noise" are mentioned as part of early religious functions.

Indeed, it is as accurate as a single brief statement can be made to say that our whole notion of Sunday observance, what we call "the American Sabbath" as against the continental, is an outgrowth of the Puritan movement in England, and that earlier times and other lands show centuries of humble walk with God, just dealing, love of mercy, kindly visitation upon the afflicted, all these quite as good and pure as ours. But that is another story.

WILLARD C. FISHER.

Middletown, Jan. 24, 1913.

churches, even as a temporary experiment. I am constrained to the conviction that your attitude in the matter is so far out of harmony with the spirit of the college, which, though in no wise sectarian, is and always has been profoundly in sympathy with the Christian churches, that your continuance in your present official position is undesirable for the college, or for yourself. I feel, therefore, compelled to request you to offer your resignation.

Most sincerely yours,

WILLIAM ARNOLD SHANKLIN

Wesleyan University, Middletown, Conn.,
Economics and Social Science,

January 27, 1913.

My Dear Dr. Shanklin:—Of course I shall respond at once to your request for my resignation. Here it is. It is given cheerfully and, as I trust, in full appreciation of the situation. I do not express, I do not even undertake to frame for myself a judgment as to what I might think the correct course for the college to take in such a case. But my judgment is not needed and it might be biased. I am, however, free enough from prejudice to see very clearly that a college with the history and the constituency and support of Wesleyan is not exactly the place for a man who holds such views as mine and who can not suppress them. I leave the college, therefore, without a trace of ill will toward anybody connected with it. Indeed, I go with the warmest wishes for the institution to which I have given the twenty best years of my life.

Very cordially yours,

WILLARD C. FISHER

Wesleyan University, President's Office,
Middletown, Conn., January 27, 1913.

My Dear Professor Fisher:—I have your favor, resigning from the faculty of Wesleyan University. I hereby relieve you from your duties, pending the presentation of your resignation to the board of trustees.

I shall recommend that your salary be paid in full for the present academic year.

Appreciating your spirit of good will to the college, I am,

Most sincerely yours,

WILLIAM ARNOLD SHANKLIN



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The American Economic Review

Volume III, No. I

SUPPLEMENT

March, 1913

PAPERS AND PROCEEDINGS

of the

Twenty-fifth Annual Meeting

of the

AMERICAN ECONOMIC ASSOCIATION

BOSTON, MASSACHUSETTS

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TWENTY-FIFTH ANNUAL MEETING

The Twenty-fifth Annual Meeting of the American Economic Association was held at Boston, Massachusetts, on December 27 to 31, 1912. The program, as carried out, was as follows:

PROGRAM

FRIDAY, December 27.

3 p. m. A meeting of the Executive Committee. Room B, the Copley Plaza.

4 p. m. The American Sociological Society and the American Statistical Association held a joint session, at which the presidential addresses of these societies were made, and to which the members of the American Economic Association were invited.

8 p. m. The American Historical Association invited the members of the American Economic Association to attend the presidential address of its Association, at Symphony Hall, by Colonel Theodore Roosevelt.

9 p. m. Informal gathering of members of all the Associations at the Copley Plaza, following Colonel Roosevelt's address.

SATURDAY, December 28.

9 a. m. Business Meeting of the Association, with Reports. Room 22, Walker Building, Massachusetts Institute of Technology.

FIRST SESSION

10 a. m. Joint session with the American Association for Labor Legislation. Huntington Hall, Massachusetts Institute of Technology. Presiding: Frank A. Fetter, President of the American Economic Association.

THE THEORY OF THE MINIMUM WAGE.¹ Opening paper by Henry R. Seager, President of the American Association for Labor Legislation. Discussion under the ten-minute rule:

John R. Commons, Professor of Political Economy, University of Wisconsin.

George W. Anderson, Member of the first Massachusetts Minimum Wage Commission.

George G. Groat, Professor of Economics and Sociology, Ohio Wesleyan University.

Henry Abrahams, Secretary, Cigar Makers' International Union No. 97. Edward F. McSweeney, Member Massachusetts Industrial Accident Board.

Paul U. Kellogg, Managing Editor of the *Survey*.

Discussion under the five-minute rule:

Matthew B. Hammond, Professor of Economics and Sociology, Ohio State University.

¹The papers of this session are published in full in The American Labor Legislation Review, Vol. III, No. 1.

Emily G. Balch, Professor of Economics and Sociology, Wellesley College.

George W. Noyes, Treasurer of the Oneida Community.

R. R. Bowker, Editor of *Publishers' Weekly*.

Professor Seager, concluding.

12.30 p. m. Buffet luncheon, provided by the local membership. The Copley Plaza.

SECOND SESSION

2.30 p. m. Huntington Hall. Presiding: Henry C. Adams, Professor of Political Economy and Finance, University of Michigan.

THE RISING COST OF LIVING. Opening paper by Irving Fisher, Professor of Political Economy, Yale University.

Discussion under the ten-minute rule:

Nat C. Murray, Bureau of Statistics, Department of Agriculture, Washington, D. C.

Albert C. Whitaker, Professor of Economics, Stanford University.
Willard C. Fisher, Professor of Economics and Social Science, Wesleyan University.

Charles P. Neill, Commissioner of Labor, Washington, D. C.

Discussion under the five-minute rule:

Oliver M. W. Sprague, Professor of Banking and Finance, Harvard University.

B. M. Anderson, Jr., Professor of Economics, Columbia University.

R. R. Bowker, Editor of *Publishers' Weekly*.

E. W. Kemmerer, Professor of Economics and Finance, Princeton University.

Professor Irving Fisher, concluding.

THIRD SESSION

8 p. m. Joint Session with the American Political Science Association. Banquet Hall on first floor of the Copley Plaza. Presiding: Richard C. Maclaurin, President of the Massachusetts Institute of Technology.

PRESIDENTIAL ADDRESSES:

1. Frank A. Fetter, President of the American Economic Association. Population or Prosperity.
2. Albert Bushnell Hart, President of the American Political Science Association. A Government of Men.

10 p. m. Smoker at the City Club, 9 Beacon Street.

MONDAY, December 30.

All sessions for this day were held in Cambridge.

9 a. m. Meeting of the Executive Committee. Room 1, New Lecture Hall, Harvard University.

FOURTH SESSION

10 a. m. New Lecture Hall, Harvard University. Presiding: E. Dana Durand, Vice-President of the American Economic Association; Director of the Census.

BANKING REFORM. Opening paper by E. W. Kemmerer, Professor of Economics and Finance, Princeton University.

Discussion under the ten-minute rule:

J. H. Hollander, Professor of Economics, Johns Hopkins University.

L. D. Peavey, of the Babson Statistical Organization.

Oliver M. W. Sprague, Professor of Banking and Finance, Harvard University.

E. E. Garrison, of the *Wisconsin State Journal*.

Everett W. Goodhue, Professor of Economics, Colgate University.

Discussion under the five-minute rule:

Royal Meeker, Professor of Political Economy, Princeton University.

John R. Commons, Professor of Economics, University of Wisconsin.

Arthur S. Dewing, Assistant in Economics, Harvard University.

Oswald W. Knauth, Instructor in Economics, Princeton University.

*L. N. Hershfield, New York City.

John M. Clark, Professor of Economics, Amherst College.

*Garrett Droppers, Professor of Economics, Williams College.

*A. C. Whitaker, Professor of Economics, Stanford University.

Eugene E. Agger, of Columbia University.

John H. Sherman, of Philadelphia.

Professor Kenmerer, concluding.

12.30 p. m. Luncheon offered by Harvard University. Memorial Hall.

FIFTH SESSION

2-5 p. m. Round Table Meetings.

2-4 p. m. Room 5, Harvard Hall, Presiding: President Fetter.

ECONOMIC THEORY. THEORIES OF DISTRIBUTION. Simon N. Patten, Professor of Political Economy, University of Pennsylvania, Leader.

Discussion by B. M. Anderson, W. M. Adriance, L. N. Robinson, etc.

3-5 p. m. Room 6, Harvard Hall.

AGRICULTURAL ECONOMICS. FARM MANAGEMENT. H. C. Taylor, Professor of Agricultural Economics, University of Wisconsin, Leader.

Discussion by T. N. Carver, L. G. Powers,* C. K. Graham, William Hill, J. A. Valentine, Geo. H. Ellis,* Richard Hittinger, W. H. Bowker, Nat C. Murray,* and W. O. Hedrick.

2.30 p. m. General Hugh Bancroft, Chairman of the Directors of the Port of Boston, conducted a party of members of the American Economic Association around the port and explained to them the plans for the expenditure of the nine million dollars which have been appropriated for its improvement.

5 p. m. Reception by President and Mrs. Lowell.

6 p. m. Informal dinner at Harvard Union.

TUESDAY, December 31.

9 a. m. Business Meeting of the Association. The Copley Plaza.

SIXTH SESSION

10 a. m. Huntington Hall. Presiding: John R. Commons, Vice-President of the American Economic Association; Professor of Political Economy, University of Wisconsin.

ECONOMICS OF GOVERNMENTAL PRICE REGULATION. Opening papers by

* Did not furnish manuscript.

J. M. Clark, Professor of Economics, Amherst College; and Chester W. Wright, Professor of Economics, University of Chicago.

Discussion under the ten-minute rule:

F. W. Taussig, Professor of Economics, Harvard University.

Eliot Jones, Instructor in Economics, Harvard University.

John H. Gray, Professor of Economics, University of Minnesota.

Oliver M. W. Sprague, Professor of Banking and Finance, Harvard University.

T. N. Carver, Professor of Political Economy, Harvard University.

W. Z. Ripley, Professor of Political Economy, Harvard University.

*C. J. Bullock, Professor of Economics, Harvard University.

Francis E. Stanley, Newtonville, Mass.

1 p. m. Subscription luncheon, at the Copley Plaza.

Presiding: Professor Albert Bushnell Hart. Brief addresses by Albion W. Small, Dean of The University of Chicago; Talcott Williams, of the School of Journalism, Columbia University; S. C. Mitchell, President of The University of South Carolina; Charles W. Eliot, President Emeritus of Harvard University.

* Did not furnish manuscript.

POPULATION OR PROSPERITY

ANNUAL ADDRESS OF THE PRESIDENT

FRANK A. FETTER

Princeton University

The humanitarian doctrine of population.

The question posed by Malthus refuses to be ignored. Again and again the nations are forced to give ear to it. The celebrated essay in 1798 marked the boundary between two eras of thought on this question. Before that a large and increasing population was generally favored; since that date it has never ceased to be looked upon by some with doubt and with fear.

The contrast between the two eras, however, is less in respect to the judgment of results than in respect to the criterion by which those results are to be measured. Before Malthus the criterion was the prosperity of the sovereign and of the ruling classes; thereafter it became the welfare of the increasing masses. Unwittingly, but none the less truly, Malthus set before the eyes of men a new picture of the humble unit of population. Instead of the man with the hoe, patient taxpayer and soldier of the king, frugal workman contributing with his teeming fellows to swell the rents of landlords and the profits of employers, Malthus helped the world to see the human individual, striving to maintain a family and to win the joys of life, but finding the very number of his fellows an obstacle in the way toward these ends. Before Malthus population was a question either of political or of commercial economy; with him it began to be a question of social economy.

These statements appear paradoxical when one recalls that the first purpose of Malthus was to dispel the illusory hopes of social perfection. His proposition that population has a fateful tendency to outstrip the production of food was used to condone the patent evils of existing society. His doctrine became the stock argument to discourage plans of social betterment. This may all be granted. Our purpose is not to praise Malthus but to appreciate him. In the perspective of more than a century neither the conscious purposes of men nor the immediate applications of their teachings are usually seen to have determined their real influence. Malthus had in some ways a narrow outlook, and his often confused thought gave false implications to the main

truth he brought to public attention. Yet he was a man of gentle spirit, far from harsh and unsympathetic. Approaching the question solely with the purpose of the student without political or commercial bias, he became the agent in advancing, if not in originating, the humanitarian and democratic treatment of the population problem. That problem is to determine the best proportion between the number of inhabitants and the area and resources of a land, judged with reference to the abiding welfare of the great mass of the people of the nation.

English population doctrine in the 19th century.

When Adam Smith wrote, he could cite many evidences of the rise of real wages during the course of the eighteenth century. Twenty-two years later Malthus wrote in a time of war, of near-famine, of increasing population, and of decreasing prosperity for the masses. The forty years that followed were a period of misery unequalled in modern times for the working classes of Britain. In this time in England the dominant opinion accepted the Malthusian doctrine as the explanation of what was happening, and derived from it conservative and pessimistic conclusions as to the popular welfare. Some social corollaries of the doctrine were however drawn by James Mill and other Radicals and were restated by J. S. Mill in his *Political Economy* in 1848. He showed the benefits to the laborers in the limitation of their numbers, whereas Malthus had never ceased to regard population as well-nigh fatalistically determined. By a turn of fate the circumstances of that very time largely robbed of practical interest Mill's views on the subject. Things had already taken a turn for the better. The worst evils of the factory system were in course of being remedied, the sanitation of cities was improving, the laborers were better organized, the rate of growth of population was slackening, and the repeal of the Corn Laws in 1846 had prepared the way for the cheapening of the food of the people even in a period of rising wages following the gold discoveries. Coöperating with these influences, the improvement of transportation was opening up new sources of food supplies on virgin soils and making them available to the markets of western Europe. In the following half century the real wages and general welfare of the masses, alike in western Europe and in the United States, were to advance almost steadily. This whole movement was well under way when Mill was writing. In such a period as that, the

Malthusian doctrine in any version could not but appear to the practical eye to be either false or futile. It lost its usefulness as a conservative argument in support of existing institutions, for the best argument was the unmistakable progress of the masses. It lost its hostile character to the champions of radical change.

American views on population.

American views on population were from the first unfriendly to the Malthusian doctrine. It appeared in the earlier textbooks of English origin or written under English influence, and as a mere classroom abstraction it was given a small measure of curious attention. But in any of its forms it involved an opinion adverse to an unrestrained increase of population, whereas the conditions in America made such an idea appear false as theory and harmful in practice. A growing population was favorable to the interests alike of landowners, of active business men, of the rival sections, and of the national government. There resulted from this economic situation a peculiarly American optimism on the subject. Density of population as an influence favorable to the division of labor and to the economies of production in manufacture was looked upon as in itself an efficient cause in increasing the per capita income. One type of this optimism, exemplified by Henry George, denied on principle that population ever could increase too much. Another type, represented by Henry Carey, held that population in fact was not likely to increase too much in America. The national bias often led to crediting to American character all of the benefits resulting from exceptional natural resources combined with relative scarcity of population. This bias and this reasoning still survive among us today.

Rapid settlement of the United States.

Students of American economic conditions are familiar with the series of shaded charts in the Census volumes on population showing by decades the extension of the settled area since 1790 and its gradually increasing density. As one studies the earlier of these charts one can see how the blank spaces on the maps of that day must have aroused the imagination and the hopes of men. There lay whole empires of land almost untenanted and calling to be used. Decade by decade for a hundred years the frontier extended at a hardly slackening rate while the density increased on the settled area, until abruptly, about 1890, the process ended or changed

its nature. The chart for 1900 shows little alteration in its outline from that for a decade earlier. The increase of population in the decade had been thirteen millions, but of these, eight millions had been added to the urban and only five millions to the rural population. In the following decade, from 1900 to 1910, the increase was sixteen millions, of which twelve millions were added to the urban and but four millions to the rural population. Dividing our national history since 1790 into four periods, each of thirty years, it is seen that in the first the density per mile increased .7 of an inhabitant, in the second 2.4 inhabitants, in the third 9, and in the fourth 14. Thus the increase in the number per square mile has gone on at an accelerating rate, and was twenty times as fast in the last as in the first period. As an index of the demands which increasing population makes upon resources, these figures are more truly significant than are the absolute numbers of people or the percentage of increase by decades; for they show how many additional inhabitants must find employment, materials, and food on the available area. This means greater intensiveness of utilization. The cumulative additions are now made on an area nearing, or already past, the point of maximum advantage to the masses of the nation.

Disappearance of the frontier.

By 1890 the habitable agricultural area of the United States had not been completely occupied, but the frontier of fertile lands ready for man's use had at length been all but attained. Suddenly was unmasked the true character of those great, uncolored areas shown on the map. Deserts they are, for the most part, deserts they must ever remain. Nature had no more free gifts to distribute to the prodigal children of America. She would grant still some new arable fields, but only for the price of toil and patient art. Our increasing population must thenceforth find its livelihood in the more intensive cultivation of the settled areas. We had been rapidly losing those economic advantages which had distinguished us from the older, more densely settled countries. A new economic situation confronted our people.

Economic results did not long delay their appearance. In the nineties of the last century the wave of popular prosperity at length attained its crest. Some great forces lifting wages throughout Christendom despite any counteracting effects from increasing population seem at last to have spent themselves. Cheap food

from America had been a boon to the European workman as well as to the American. The year 1896 marked the lowest American prices in recent decades for food and for farm products. The year 1898 was that of maximum export of foodstuffs from the United States. Since 1896 food and other farm products have almost steadily advanced in price at a more rapid rate than general prices; since 1898 exports of foodstuffs from the United States have less steadily, but none the less surely, declined. In the past twenty years the general progress in science and the technical arts has been phenomenal. It is the accepted economic belief that the trend and effect of such changes is favorable to the real wages of labor. The last twenty years, therefore, should have been a period of rapidly rising wages had not this technical progress been offset by some powerful opposing forces. Why have real wages risen so slowly or even fallen? In part no doubt the explanation may be found in the fact that when the general scale of prices is rising wages move more tardily. In large part the explanation must be found in the fact that we have passed the point of diminishing returns in the relation of our population to our resources. The growth of population is serving to neutralize for the masses of the people the gains of technical progress. It is high time to revise the optimistic American doctrine of population.

Extravagant estimates of future population.

The public is accustomed to the estimates of enormous population possible on the present area of this country. These estimates express to many, perhaps to most Americans, not only the possible but also the inevitable and desirable increase. They ask: why should not an area almost equal to that of Europe support 400,000,000 instead of one fourth that number? We have little more than thirty inhabitants per square mile. France and Austria-Hungary have each a population over six times as dense, Switzerland eight times, Germany and Italy ten times, the Netherlands fifteen times, and Belgium twenty-two times. We have but to equal Italy to support a population of a billion. We have but to equal Belgium to support two and a quarter billions. But if we could conceivably support such a future population on the present area it would be in what manner, with what gain to civilization and at what cost to the popular welfare?

Take the German Empire as a standard of comparison. Despite the great material advances in Germany of late, the real wages of

the working people are much below those in America. Who would suggest that with the conditions of popular thought in America we could calmly contemplate the decline of wages and of the standard of living among us toward those of the German masses today?

The Swiss in their mountainous land with a population four fifths as dense as that of Germany are achieving quite as wonderful a result. Only a marvel of patient industry enables the Swiss to draw their livelihood from such an area. Watch the Swiss peasant at his work and you may understand. The cattle stand in the stable while the peasant cuts their food and brings it to them lest they may trample down the precious grass. Man's labor is less valuable there than are the uses of that little patch of land. In the haying season the harvester clings with one hand to the steep mountain side, cutting the grass by the handful and piling it in little bunches loaded down with stones to keep it from blowing away, until it can be carried down into the valley on the backs of men and women. That is what such a density of population means, translated into terms of human labor.

Shall Italy be our population-ideal? A recent well-known traveler¹ from America reports the ordinary food of the laborer in Sicily as consisting of "a piece of black bread and perhaps a bit of soup of green herbs of some kind or other." "For days or months the peasants live on almost any sort of green thing they find in the fields, frequently eating it raw just like the cattle."

Consequences of further rapid increase.

In the light of such facts, the flights of speculative statistics regarding the possible increase of our population evidence a forgetfulness of economic principles and a recklessness of economic consequences. To force production very fast or far on a given area entails some notable results. Cultivation must become in part more intensive, with hand labor, in part more expensive, with a larger investment in equipment on larger farms.

We have heard much of late the appeal, Back to the land! As a plan to be followed by masses of men with the hope of relieving the pressure of population it is vain. Every time one pair of hands is added to the agricultural population, three more mouths are added to the city population waiting to consume the products.

America has no exclusive knowledge of mechanical inventions and no exclusive claim to their use. They are internationally

¹ Booker T. Washington, in *The Man Farthest Down*, 1912.

patented and for sale. Whoever finds it profitable may use them. If they are used less in other countries it is because the work can be done more cheaply by hand under their conditions. The general level of the use of machinery is largely fixed by the relations between population and resources, and not by any mysterious racial talent for machinery. It is the density of population that mainly explains the contrast in this regard between the people of Europe on the one hand, and on the other those of the same races in America, Canada, and Australia.

Popular welfare in America is already threatened. To preserve the favorable relation of population to resources and to control in some measure the fate and fortunes of the children of this and future generations the two most important means possible are: conservation of national resources, and retarding the rate of increase of population.

Need of a conservation policy.

For the conservation movement, that sadly belated attempt to check national prodigality, let us speak only words of approval. But we must recognize its limitations. As to minerals, it only delays their inevitable, final exhaustion. At the present rate of increase of the use of our stores, iron ore will be exhausted in thirty years, petroleum in ninety years, and coal in one hundred fifty years. If, however, the population became stationary, the periods of possible use would be enormously extended. In the reclamation of soil by drainage and irrigation the outlook is that about 15 per cent may thus be added ultimately to the area in farms, representing at the most 40 per cent addition to the present food production by present methods. Even when all this has been accomplished at much cost it provides barely for two decades of increase of our population at the present rate, and by 1930 the national demand for food will again be in the same relation to the productive area that it now is.

The hope is ever with us that improvements in agricultural methods will offset the influence of the increase of population. We rightly speak of the wonders of the new agriculture; but these improvements fast crowding upon each other in the past two decades have not even kept the cost of food from increasing in terms of the common man's wage. Shall we then base an economic policy on the assumption of much greater improvements which as yet are only in the realm of imagination? Undoubtedly the de-

velopment of water power will retard the trend toward higher prices of coal; forestry will eventually grow lumber enough to meet the greatly curtailed demand at higher prices; but, given a population steadily increasing at anything like the present rate, and real wages in America must decrease in terms of food, clothing and fuel, and all the commodities dependent on wood, iron, copper, and other primary materials. The steady increase alone of population will offset the popular benefits of the new miracles of industrial progress.

Declining rate of natural increase.

The percentual rate of increase of population in the United States has shown a general downward trend since the Civil War. Before 1860 it had been steadily near 35 per cent each decade; between 1860 and 1890 it ranged between 30 and 23 per cent; and in each of the last two decades it has been about 21 per cent. This downward trend has been tardily following a declining birth rate. Race suicide, however, is very far from being an imminent peril for the nation as a whole. The real occasion for disquietude is that this phenomenon is so largely correlated with education and with eminent attainment. In many families the birth rate is much too high for the welfare of the parents, of the children, and of the community. Recent studies among city populations have demonstrated that as the number of births in a family passes a moderate limit the mortality increases inordinately.

Our population increased between 1900 and 1910 nearly sixteen million people. A much slower rate of growth would realize the common prediction of a quarter billion in another century, and a half billion in two centuries. So far as these figures are based on forecasts of "natural increase" (exclusive of immigration), they may prove to be largely overestimated. Changes in public opinion, in social standards, in the means of communication and of education, in industry, and in family relations, are in rapid progress. Affecting wider and wider circles, these influences promise to strengthen greatly the forces making for volitional control of population. The earlier applications of the doctrine of eugenics probably will be to control the increase of mental and of physical defectives. These forces, if not neutralized, will rapidly reduce the rate of increase.

The question of immigration.

In the decade ending 1910, but for immigration, the rate of increase of the total population would have been much less instead of somewhat greater than that of the preceding decade. But in 1910 there were over three million more foreign-born persons in the country than were here ten years earlier. One fifth of the increase in population consisted in foreign-born, and another fifth of their children born in America. In each of the six years preceding the census nearly a million immigrants arrived. All previous records were exceeded. The continuing possibilities of immigration as a source of contributions to our population in the future are enormous.² As migration is made easier by the spread of information and by the improvement of the means of travel, the lure of a higher wage becomes more and more effective. There is no limit to this motive, except the meager cost of steerage passage, until real wages in America are leveled down to those of the most impoverished populations permitted to enter our ports.

The current objections to immigration are mainly based on the alleged evil effects to the political, social, and moral standards of the community. It is often asserted that present immigration is inferior in racial quality to that of the past. Whatever be the truth and error mingled in these views, we are not now discussing them. Our view is wholly impersonal and without race prejudice. If the present immigration were all of the Anglo-Saxon race, were able to speak, read and write English, and had the same political sentiments and capacities as the earlier population, the validity of our present conclusions would be unaffected.

The open-door policy, then and now.

When our policy of unrestricted immigration is thus opposed to the interests of the mass of the people, its continuation in a democracy where universal manhood suffrage prevails, is possible only because of a remarkable complexity of ideas, sentiments, and interests, neutralizing each other and paralyzing action. The American sentiment in favor of the open door to the oppressed

²The assumption that immigration constitutes a net addition to the population is not in accord with the well known theory of Francis A. Walker. He believed that immigration had the effect of reducing the birth rate of the native born so greatly that the net increase was about what it would have been without immigration. Let it suffice to say that this view seems to be a misreading of the evidence and an exaggeration of a truth of limited application.

of all lands is a part of our national heritage. The wish to share with others the blessings of freedom and of economic plenty is the product of many generations of American experience. The open door policy had partly a political basis: a growing population in a young and sparsely settled country gave greater security on the frontier of settlement and greater strength against foreign enemies. The policy had, however, mainly an economic basis: land was here a free good on the margin of a vast frontier. Most citizens benefited by a growing population. Let it not be accounted cynicism to recognize in this national self-interest the source of a generous sentiment toward the incoming stranger. That sentiment, truly generous, now lingers after its real cause has disappeared. It impels to an unthinking liberality to the alien while sacrificing the heritage of the workers of America; it makes the citizen with humane ideals the misguided ally of commercial greed. The open door policy is vain to relieve the condition of the masses of other lands. Emigration from overcrowded countries, with the rarest exceptions, leaves no permanent gaps. Natural increase quickly fills the ranks of an impoverished peasantry. If America with futile hospitality continues to welcome great numbers from countries with low standards of living, she can but reduce the level of her own prosperity while affording no permanent relief to the overcrowded lands. Nations under bad governments must find relief through the reform of their own political conditions. Lands whose people are in economic misery must improve their own industrial organization, elevate their standards of living, and limit their numbers. If they go on breeding multitudes which find an unhindered outlet in continuous migration to more fortunate lands, they can at last but drag others down to their own unhappy economic level.

The pride of immigrants and of their children, sometimes to the second and third generations, is another strong force opposing restriction. Immigrants, having become citizens, are proud of the race of their origin, and resent restriction as a reflection upon themselves and their people. One may admire the loyalty and idealism here manifested, while regretting that these sentiments and arguments serve to distract attention from the real problem to minor and irrelevant incidents.

Public welfare or private profits.

A strong commercial motive operates in the most influential class of employers in favor of the continuance of immigration.

From the beginning of our history, proprietors and employers have looked with friendly eyes upon the supplies of comparatively cheap labor coming from abroad. This has been a potent factor in many of our political and economic policies. The early comers to America strove in every way to obtain a cheap labor force through immigration. Large numbers of immigrants or of their children have been able soon, in the conditions of the times, to become proprietors and employers. Thus was hastened the peopling of the wilderness. The interest of these classes harmonized to a certain point with the public interest; but likewise it was in some respects in conflict with the abiding welfare of the whole nation. It encouraged much defective immigration from Europe, and led to the fateful introduction of slavery from Africa. A small planter class, heedless of the future, provided for its own ease, but it left to posterity a dark and bloody heritage which still remains the greatest threat to the American democratic experiment.

The immigration from Europe has furnished an ever changing group of workers moderating the rate of wages which employers otherwise would have had to pay. The continual influx of cheap labor has aided in imparting values to all industrial opportunities. A large part of these gains have been in the trade, manufactures, and real estate of cities as these have taken and retained an ever growing share of the immigrants. Successive waves of immigration, composed of different races, have been ready to fill the ranks of the unskilled workers at meager wages. This continuous inflow has in many industries come to be looked upon as an indispensable part of the labor supply. Conditions of trade, methods of manufacturing, prices, profits, and the capital value of the enterprises have become adjusted to the fact. Hence results one of those illusions cherished by the practical world when it identifies its own profits with the public welfare. Without immigration, it is said, the supply of labor would not be equal to the demand. It would not at the present wages. Supply and demand have reference to a certain price. At a higher wage the amount of labor offered and the amount demanded will come to an equality. This would temporarily curtail profits, and other prices would, after readjustment, be in a different ratio to wages. Such a prospect is most displeasing to the commercial world, quick to see disaster in a disturbance of profits, slow to see popular prosperity in rising wages.

Abnormal labor conditions.

The labor supply coming from countries of denser population and with low standards of living creates, in some occupations, an abnormally low level of wages and prices. Children can not be born in American homes and raised on the American standard of living cheaply enough to maintain at such low wages a continuous supply of laborers. Many industries and branches of industry in America are thus parasitical. A condition essentially pathological has come to be looked upon as normal. It is the commercial ideal which imposes itself upon the minds of men in other circles. The new immigration has recently been described by an author who combines wide knowledge of the facts with keen sympathy for the immigrant. He says:² "The past industrial development of America points unerringly to Europe as the source whence our unskilled labor supply is to be drawn. . . . America is in the race for the markets of the world; its call for workers will not cease." Yet a few pages further he must say: "All wage earners in America agree that it is not as easy to make a living today as it was twenty years ago, and the dollar does not go as far now as it did then. The conflict for subsistence on the part of the wage earner is growing more stern as we increase in numbers and industrial life becomes more complicated, and the fact must be faced that the vast army of workers must live more economically if peace and well being are to prevail." Here is our argument: increase in numbers is making the conflict for subsistence more stern. But how different the conclusion!

The opposition to restriction.

What tremendous forces are combined in favor of a policy of unrestricted immigration: sentiment and business, generosity, selfishness, laborers, employers. All men are prone to view immigration in its details, not in its entirety. They see this or that individual or class advantage, not the larger national welfare. The interests of capitalists and of the newly arriving immigrants are abundantly considered; the interests of the mass of the people now here are overlooked.

The depressing effect of the ever present and ever renewing supply of immigrant labor upon wages, appears most clearly at the time of wage contests, and often seems to be the most impor-

² Peter Roberts, in *The New Immigration*, 1912, preface, p. viii, and p. 47.

tant aspect of the question. The law against contract labor does not check the great stream of those guided by friends to a "job." If immigration were suddenly stopped in a period of normal or of increasing business, wages in many occupations would at once rise, and that, without the aid of strikes or arbitration. This would affect most those occupations which now present the most serious social problems, in mines, factories, and city sweat shops. In some small measure the war in the Balkan States, by recalling many men for service, has had this influence. Organized labor thinks most of these immediate effects. Commonly labor's protest is expressed in terms of the untenable "lump of labor" theory of wages. "Every foreign workman who comes to America" is believed to take "the place of some American workman." The error in this too rigid conception of the influence of new supplies of labor need not be argued before an audience of economists. But in the light of the doctrine of population there is no mistaking the influence of continually increasing numbers in gradually and permanently depressing the whole plane of wages. It is generally assumed that when the immigrants and their children become Americanized and raise their standard of living their presence no longer has any effect in depressing wages below what they otherwise would have been. Indeed it is tacitly assumed that the law of increasing returns operates as population becomes denser, and that the general prosperity is enhanced by the mere growth of numbers. This idea was measurably true so long as national growth was one of extension into unoccupied areas, and the average density of population was low. It ceases to be true whenever the ideal point of equilibrium between population and resources has been attained. The territorial distribution of immigrants, their training in the English language, and their adoption of American standards of living, can not change a mathematical fact.

Conditions of progress.

John Stuart Mill, in discussing the future of society when population might be expected to have ceased increasing, employed an already current term, the "stationary state." The phrase is hardly felicitous for, as he explained, this does not mean a society stationary in the industrial arts and in mental, moral, and social culture. Indeed it was just such a condition of a stationary population that he deemed the ultimate ideal when once that de-

gree of density had been attained which made possible the highest level of the general welfare. The theory of evolution as applied to social progress has suggested that a certain pressure of conflicting and thwarted desires is required to keep a people industrious, inventive, and progressive. The crude version of the theory implies the necessity of competition on the plane of physical want resulting from the pressure of population. A subtler conception would place this competition on the higher plane of developing desires made possible by industrial advance, political democracy, popular education, and a widening horizon of thought. A large part of our people have attained that stage now, and the cultural circle is ever widening. The spur of progress consists of the felt limitations of incomes, relative to expanding desires, rather than in the pangs of hunger. Once the spur of progress was objective, now it is subjective.

Popular aspirations and ideals.

In the last century popular education and ideals were rising at the same time that a rising scale of wages was made possible by industrial improvements accompanying the development of great material resources. Yet this fortunate union of events did not suffice to prevent the growth of discontent. Popular aspirations outstripped material progress. Much more ominous is the situation now that the pressure of population in America is beginning to check and reverse this trend of the popular welfare. Those who profit for a time by these shifts in the forces of distribution may find, like those who benefited by slavery, that they have bartered the peace and security of their children for the pleasures of a brief season.

The common man in our democracy has at stake the preservation of the advantages of our broad territory and bountiful resources. The only factor in the present increase of population that is controllable in large measure by legislative action is immigration. Many representatives of organized labor, though moved by more immediate considerations than those here presented, favor limitation. But the mass of the workers, diverted by false councils, traditional sentiments, and racial sympathies, are divided on the question. Without help from other groups of citizens the laborers of America can not obtain the needed legislation. Whether that help will be progressively granted in the years to come depends on the clearness of our economic judgments and on

the strength of our patriotic ideals. Perhaps those ideals are not clear to us. Would we have the level of the popular welfare in America fall even by a little if this could be prevented? Would we rival other lands rather in population than in prosperity? Would we wish to gain in density of settlement while losing in that largeness of opportunity and of outlook which makes possible the traits most distinctive of American life? Already we have on our map many cities swarming like ant hills, the delight of the real estate speculator and the despair of true friends of humanity. Shall it be our ideal to multiply men on city streets and in smoking suburbs, away from fields, and forests, and mountains; or shall we not rather give to all our people space to earn an ample living and to live an ample life, worthy of our democratic ideal?

A REMEDY FOR THE RISING COST OF LIVING STANDARDIZING THE DOLLAR

By IRVING FISHER

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This is the third meeting of the American Economic Association in which the problem of the high cost of living has been considered. Two years ago we considered the general principles which may explain the high cost of living, and last year we considered the plan for an international conference on the high cost of living. One of the many subjects which would come before such a conference would be the proposed remedies for price fluctuations.

My present purpose is to present, as one of these remedies, a plan to "standardize the dollar." I am not denying the importance of other remedies and do not claim to have found a panacea for all the ills associated with the "high cost of living." The remedy here suggested does not take the place of economies of production, nor does it concern itself with incomes and earning power. It aims merely to establish a more stable unit in which to measure all these things, to convert our dollar into a fixed yardstick of purchasing power.

In my address before the International Congress of Chambers of Commerce three months ago, I outlined the plan in a few words. Since then it has been so often misunderstood that I am taking this earliest opportunity to make a fuller statement of it. I must refer those desiring still fuller and technical details to the closing chapter of my *Purchasing Power of Money* and, more especially, to an article in the February number of the *Quarterly Journal of Economics*.

Briefly stated, the plan is to introduce the multiple standard, in which the unit is a "composite ton" or "composite package" of many staple commodities, not of course by using such a package in any physical way but by employing instead its gold bullion equivalent. In essence it would simply vary the weight of gold in the dollar or rather behind the dollar. The aim is to compensate for losses in the purchasing power of each grain of gold by adding the necessary number of grains of gold to the dollar.

Both on the basis of theory and of facts, we may accept as sound the principle that the lighter the gold dollar the less its purchasing power and the more magnified the scale of prices; and that the heavier the dollar the greater its purchasing power and

the more contracted the scale of prices. Evidently if we can find some way to increase the weight of the dollar just fast enough to compensate for the loss in the purchasing power of each grain of gold, we shall have a fully "compensated dollar," that is, a dollar which has constantly restored to it any purchasing power it may lose by gold depreciation.

We now have a dollar of fixed weight (25.8 grains), but varying purchasing power. Under the plan proposed, we should have a dollar of fixed purchasing power, but varying weight.

But how is it possible to have a dollar of varying weight without the annoyance of a constant recoinage of gold coin? Moreover, if this can be done, how can we know at any time what weight the dollar ought to have without leaving this to the tender mercies of some political official? Here are two very vital questions.

As a preparation for answering these two questions, it will be a little easier to explain the principle of the proposal if for a moment we assume that there are no actual gold coins in circulation, but only gold certificates. This supposition is, in fact, not very far from the truth in the United States; for, outside of California, there is very little actual gold coin in circulation. We have instead nearly a billion dollars of gold certificates in circulation, representing gold in the Treasury of the United States. We are supposing for the moment that gold circulates in no other way. Under these circumstances it is evident that the ultimate gold dollar is out of sight in the Treasury of the United States in bars of gold bullion. Every 25.8 grains of this gold bullion is a *virtual dollar* behind a dollar of gold certificates outstanding. A gold bar (of standard bullion) weighing 25,800 grains virtually contains 1000 gold dollars.

The gold miner takes such bars of standard gold to the mint and deposits them without waiting for their coinage, receiving gold certificates in return, one dollar of gold certificates for each 25.8 grains of standard gold which he deposits. On the other hand, holders of gold certificates may at any time receive gold bullion in return, when they desire this for export, or for use in the arts of jewelry, dentistry, gilding, etc., receiving 25.8 grains of gold for each dollar of gold certificates. Thus the government on demand gives or takes money at the rate of 25.8 grains of bullion per dollar; the virtual, though invisible, dollar being this 25.8 grains of gold bullion, nine tenths fine.

The proposal here made is to change the weight of the dollar as an offset to changes in value. If there are no gold coins, it is very easy to do this. For example, if there should be a decrease of 1 per cent in the value, that is, purchasing power of gold, then the weight of gold bullion which constitutes the virtual dollar would be declared 1 per cent greater, becoming 26.058 instead of 25.8. If there should be an increase in the purchasing power of gold, the weight of the virtual dollar would be reduced accordingly. Whenever the gold miner took gold to the mint, he would receive a gold certificate not necessarily at the rate of one dollar for each 25.8 grains of standard gold, but for a larger or smaller amount as the case might be, the amount always being that amount which would possess the same purchasing power. Similarly the holder of gold certificates who wishes them redeemed in bullion for export or for the arts, would not always get exactly 25.8 grains for each dollar of certificates, but a larger or smaller sum, as the case might be. Thus the government would be receiving gold from the miner and giving it out to the jeweler just as at present, but in varying weights per dollar, instead of at the arbitrarily fixed weight of 25.8 grains. The weight of gold per dollar in which, at any particular time, gold certificates were redeemable would constitute the virtual and only gold dollar. Under these circumstances it is clear that it would be entirely feasible to change up and down the weight of the gold dollar (that is, the amount of gold bullion interconvertible with a dollar of gold certificates), and without any recoinage or other interference with the outward appearance of the currency in our pockets.

We should familiarize ourselves with another way of stating all this. Instead of saying that the government receives gold bullion at the mint and uses this for redeeming gold certificates, we may, if we prefer, say that the government buys and sells gold. It buys gold from the miner, paying for it in gold certificates; it sells gold to the jeweler, who redeems these certificates. At present, the price at which gold is bought and sold by the government is \$18.60 an ounce (for standard gold nine tenths fine). This is easily figured out from the weight of the gold dollar; for 25.8 grains of gold being our present dollar, each ounce (or 480 grains) of gold bullion contains $480/25.8$ or 18.60 virtual dollars. To say, then, that we now have a fixed weight in our gold dollar, 25.8 grains, is the same thing as to say that we have a fixed government price for gold, \$18.60 per ounce. To raise the weight

of the gold dollar 1 per cent, or from 25.8 grains to 26.058 grains, is the same thing as to lower the government price of gold from \$18.60 to \$18.42 per ounce.

We come now to the second question: How would it be possible to know the proper adjustments to be made in the weight of the virtual dollar—the gold bullion interconvertible with each dollar of gold certificates—without putting a dangerous power of discretion in the hands of government officials? In other words, how can the adjustment in the weight of the virtual dollar be made automatic? The answer is: By means of statistics called “index numbers of prices.” Such statistics are today published by the London *Economist*, the United States Bureau of Labor, the Canadian Department of Labour, and several commercial agencies, such as Bradstreet. The index number of the Bureau of Labor is based on the wholesale prices of 257 commodities, and shows from year to year the extent to which prices on the whole advance or fall,—the *average* movement of all the 257 prices.

There are various systems of index numbers, but they practically all agree remarkably well with each other. When once a system of index numbers is decided upon, their numerical calculation becomes a purely clerical matter. A statistical bureau (as for instance the present Bureau of Labor or an international statistical office) would compile and publish these statistics periodically and the actual prices on which they were based. If at any time the official index number showed that the price level had risen 1 per cent above par, this would be the signal for an increase of 1 per cent in the virtual dollar.

The plan, then, is: first, to provide for the calculation of an official index number of prices; second, to adjust correspondingly the official weight of the virtual dollar at which the government shall issue gold certificates to miners or redeem them for jewelers, in other words, to adjust the official prices of gold at which the government stands ready to buy or sell at the option of the public.

This, then, is the plan in brief—a plan virtually to mark up or down the weight of the dollar (that is, to mark down or up the price of gold bullion) in exact proportion to the deviations above or below par of the index number of prices.

A few additional details essential to the working of the plan may now be briefly mentioned. You are still waiting to see how actual gold coin could be used in such a system. To be continually

recoining the gold in circulation would, of course, be quite impracticable. But this would be unnecessary. Existing gold coin would remain unchanged at 25.8 grains per dollar, and new gold coins would be given the same weight. Gold coins would simply become what the silver dollar now is, token coins. Or, better, they would be, like the gold certificates, mere warehouse receipts, or, as it were, "brass checks" for gold bullion on deposit in the Treasury. Otherwise expressed, *gold coin would be merely gold certificates printed on gold instead of on paper.* They would be used exactly as gold certificates are used—namely, issuable to the gold miner in return for his bullion, and redeemable for those who wished bullion for export or in the arts.

The excess of bullion over the weight of the coined dollar itself would be analogous to what has generally been called "seigniorage;" so that in a sense, the plan may be described as a plan to restore the ancient custom of seigniorage on gold coin. Thus, if the virtual dollar were at any time 35.8 grains, the excess of ten grains above the weight of the coin dollar, 25.8 grains, would be "seigniorage." The gold miner, in return for every 35.8 grains of standard gold bullion taken to the mint, would receive, at his option, a gold certificate on paper, or a gold certificate on gold (*that is, a dollar gold coin*)—the latter containing, just as at present, 25.8 grains. Any holder of gold coin, old or new, and any holder of gold certificates could receive from the government gold bullion at the official rate declared from time to time. He would thus be receiving a larger quantity of gold bullion than the amount of bullion in the gold dollar. The gold coin would then, like all our other coins, be worth more as coin than as bullion, and its value would be determined just as the value of a gold certificate or any other paper money is today determined, by the ultimate bullion with which it would be interconvertible, this bullion being of greater weight than the weight of the dollar itself.

The only real complication which would be introduced by allowing gold coin to remain at its present weight and fineness would be to limit the operation of the system when prices tended to fall below the par or starting point at which the system began. The weight of the virtual gold dollar could never be reduced below the weight of the coin dollar; for, if this were done, the seigniorage would become a minus quantity and all the gold coin would be immediately melted into bullion, being worth more melted than coined. One proviso, therefore, in the system would be that the

weight of the virtual dollar should never be *less* than 25.8 grains and that therefore the government price of gold should never be *more* than \$18.60 per ounce. Perhaps, in view of the present dissatisfaction with high prices, many people would not object to this limitation which permits prices to fall below the present level, but does not permit them to rise further. Yet it is a poor rule that will not work both ways. Consequently, while I personally look forward to an upward tendency of prices in the future, the possibility of a downward movement should be provided for. For this purpose, gold coin could, if desired, be recalled at the outset and recoined in lighter weight, just as the Philippine peso was recalled and reduced in weight when the recent rise in the price of silver threatened to lead to melting the silver pesos. But I do not advocate crossing the bridge until we come to it. It would be sufficient to provide in advance for crossing it in case we should ever come to it. This could be done in one of two ways. It could be provided that, if ever the price level should, in the future, sink more than, say, 10 per cent below the original par or price level from which the system started, all gold coins should then be withdrawn from circulation and gold certificates employed instead. In this way we should be rid of any complication from the use of gold coin, and would be at liberty forever after to adjust the weight of the virtual dollar downward as well as upward. Or, if preferred, it could be arranged that when prices should sink more than the suggested limit of 10 per cent below the original level, we should then recoin and reduce our gold coins. This would merely mean that the gold on which we print our gold certificates would be reduced in weight. It would not, of course, reduce the value of the gold coin any more than the reduction in the weight of the Philippine peso which was made for a similar contingency—or, to take an example nearer home, the reduction of 10 per cent in the weight of our subsidiary silver coins half a century ago—had any tendency to reduce the value of these coins.

If the latter plan were chosen, the amount of reduction in the gold coin should be enough to provide a comfortable margin for any similar emergencies in the future. Any subsequent recoinages would thus be deferred a long time and similar provision for them could be made. Personally, I should prefer the former method, eliminating gold coins altogether.

Another essential detail is a proviso to avoid speculation in gold

disastrous to the government. This would be accomplished by means of a slight government charge, say 1 per cent for minting. This charge, which existed in former days, is called brassage. It would mean that the price at any particular date at which the government bought gold would be slightly less than the price at which it sold it. Without such a margin to protect the government, it is evident that when the government raised its price, say from \$18 to \$18.10 an ounce, speculators might, in anticipation of this rise, buy all the gold in the government vaults at \$18 in order to sell it back to the government immediately after the change in price, at \$18.10, thus profiting ten cents per ounce at the expense of the government.

Similarly, a fall in price, say from \$18.10 to \$18 per ounce, would encourage the opposite form of speculation. Holders of bullion would then rush it to the government to sell it at the present rate of \$18.10, and immediately after the change in price, buy it back at \$18, thus profiting again ten cents per ounce at the expense of the government. If, however, the government were protected by a brassage charge of 1 per cent and if it were provided that no single shift in the government pair of prices, whether they were both moved up or both moved down, should exceed the "brassage" or margin between them, it is clear that no such speculation could occur, for there would be a greater loss from the payments of brassage to the government than any speculative gain possible from the change in price.

Other details relate to the provisions for establishing and maintaining a gold reserve at the outset where no such reserve existed in the first place. In the United States we could utilize the 50,000,000 ounces of gold already in the Treasury for the very purpose of redeeming the \$900,000,000 of gold certificates outstanding.

Time is lacking for any discussion of the numerous supposed objections to the plan and of the exact way in which it would work.

My colleague, President Hadley of Yale, unreservedly endorses the plan, as do most other economists. A number of financial journals, a number of presidents of banks, business statisticians and men in high positions throughout the world have done the same.

Besides these allies, there is another and more powerful ally to help any logical argument for standardizing the dollar, and that

is the grim and constant rise in the cost of living. It must be clear that our present gold standard, so called—a standard really of weight and not of value—has wrought untold mischief. For a quarter of a century—from 1873 to 1896—the dollar increased in purchasing power and caused a prolonged depression of trade, culminating in the political upheaval which led to the free silver campaign of 1896, when the remedy proposed was worse than the disease. We have since then had a reverse movement, and the growing clamor of discontent is daily adding to the ranks of the socialists, also ready with quack remedies. Unless a really scientific remedy is enacted, society will be imperiled by those who, while feeling the pinch from changes in monetary standards, do not recognize the cause.

A laboring man who put \$100 in the savings bank fifteen years ago and now withdraws his \$150, fondly imagines that he has 50 per cent more than he put in. But when he comes to spend it he finds that his whole \$150 will buy no more than his original \$100 would have bought in 1896. In other words, the depreciation of gold has tricked him out of all his interest. Naturally he is discontented, and wants to attack something, he does not much care what. He is one of millions of victims of a shrinking dollar, just as twenty years ago his father may have been one of the millions of victims of an appreciating dollar.

Instead of a standard which first benefits the creditor at the expense of the debtor, and then benefits the debtor at the expense of the creditor, let us have a system which gives a square deal to all.

We have standardized every other unit in commerce except the most important and universal unit of all, the unit of purchasing power. What business man would consent for a moment to make a contract in terms of yards of cloth or tons of coal, and leave the size of the yard or the ton to chance? Once the yard was the girth of a man. In order to make it constant, we have standardized it. We have standardized even our new units of electricity, the ohm, the kilowatt, the ampere, and the volt. But the dollar is still left to the chances of gold mining. At first we could not standardize units of electricity because we had no adequate instruments for measuring those elusive magnitudes. But as soon as such measuring devices were invented, these units were standardized. We have hitherto had a similar excuse for not standardizing the dollar as a unit of purchasing power, and so a standard

for deferred payments; we had no instrument for measuring it or device for putting the results in practice. With the development of index numbers, however, and the device of adjusting the seigniorage according to those index numbers, we now have at hand all the materials for scientifically standardizing the dollar and for realizing the long-coveted ideal of a "multiple standard" of value. In this way it is within the power of society, when it chooses, to create a standard monetary yardstick, a stable dollar.

STANDARDIZING THE DOLLAR--DISCUSSION

NAT. C. MURRAY: Whatever be the cause or causes of the advancing level of prices, or increasing money cost of living since 1896, it can not properly be attributed to any lessening of the output of agriculture, per capita of total population. This statement is prompted by the assertion, sometimes made in discussions of this subject, that production of agricultural products has not kept pace with the increase of population and that this is a sufficient explanation of the rise of prices, or at least an important factor.

As prices have been advancing in practically every important civilized country, the subject of supplies may be considered from a "world" standpoint. The population of the civilized world, excluding China, has been increasing at the rate of slightly more than 1 per cent a year, perhaps about 1.1 to 1.3 per cent. Therefore world production need increase only 1.3 per cent yearly to keep pace with increasing population. A study of statistics of world crop production shows that such production during the past fifteen years of rising prices has been increasing much faster than 1.3 per cent a year. Wheat, corn, oats, and barley have each increased, on the average, more than 2 per cent yearly since 1896, that is, since the beginning of the recent general rise of prices; rye has increased about $\frac{1}{2}$ of 1 per cent yearly. During the five-year period 1895-1899, the world production of these five staple cereals was 533 billion pounds per year; in the next five years (1900-1904) they averaged 594 billion pounds, an increase of 11 per cent, and in the next five years (1905-1909) they averaged 666 billion pounds, an increase of 12 per cent during the five-year period; this is an increase of production of 25 per cent in ten years, that is, from the first to the last period, which compares with a population increase of about 12 or 13 per cent. The rice crop so far as can be learned has been increasing more than 1.3 per cent per year. Potato production has been increasing nearly 3 per cent yearly (from 4.5 billion bushels yearly during 1900-1904 to nearly 5.2 billion bushels yearly during 1905-1909). Sugar production has been increasing nearly 4 per cent yearly (26.2 billion pounds yearly average in 1900-1904 and 31.7 billion pounds yearly during 1905-1909). Cotton production has been increasing at the rate of about 2 per cent yearly (17,487,000 bales yearly average 1900-1904, and 19,729,000 bales yearly

average during 1905-1909). Other crops could be named the production of which has been increasing faster than population. But those already named form the bulk of crop production, are representative, and sufficiently indicate that the per capita production of crops, and consequently consumption, has not been diminishing during the recent period of rising prices; but rather that, coincident with the recent world-wide advancing level of prices, world crop production has been increasing faster than population.

It is more difficult to determine the production of animal products than of field crops, but such evidence as is available indicates that world supplies of animal products have been increasing perhaps not so rapidly as cultivated crops, but as rapidly probably as is population. Twenty-six countries outside of the United States, including nearly all of Europe and the important live stock countries of Argentina and Australia, in an interval of about ten years, that is from an average date of about 1899 to an average date of about 1909, increased their supply of cattle 13 per cent, of sheep 7 per cent, and of hogs 11 per cent. It should be kept in mind, in considering numbers of live stock in connection with questions of consumption, that the products of live stock, such as milk, wool, and beef, tend in recent years to increase faster than the number of stock kept on hand. Hogs and cattle are fattened more rapidly and marketed at a younger age than formerly; the average cow of 1910 gives more milk than the average cow of 1900 or 1890; the average production of wool per sheep during the past ten years in the United States was about 16 per cent more than in the preceding decade; therefore production of animal products is greater, in proportion to the number of animals counted, than formerly. It would seem, therefore, from the figures given, that the supply of animal products, as well as crop production, has kept pace with population during the past decade of rising prices.

Referring now to crop production in the United States, it may be observed that the production per capita of total population, although varying from year to year, has not shown any decided trend, either to increase or decrease, during the past fifteen years, but there has been a decided shrinkage in the proportion of product exported, and some increase in the quantity of agricultural products imported. Manufactured food products of the United States increased about 23 per cent from 1899 to 1909

(which compares with a population increase of about 21 per cent). That is, if the same values were applied to the census figures of production in 1909 that were given in the census of 1899, an increase of total value of 23 per cent would be shown, due to that much increase in production. Similarly, the exports of such manufactured products declined in quantity 55 per cent from 1900 to 1910. Deducting exports, it appears that approximately 35 per cent greater quantity of food products was manufactured and consumed in the United States in 1909 to 1910 than in 1899 to 1910. The total decline in exports of agricultural products from the United States from 1900 to 1910 was about 37 per cent. Imports of agricultural products from 1900 to 1910 increased about 47 per cent. So that, as a net result of the movement of production, exports and imports, the quantities remaining in the United States for consumption have increased decidedly, in per capita of total population, coincident with the advances in prices.

Representing 100 as the index figure of per capita production of ten representative crops in the United States in the forty-five year period 1866-1910, the per capita production in the five years of depressed prices, 1892-1896, was 100, for which time the index figure of prices to farmers for the same articles was 76, whereas during the past five years the index figure of production is 109 and the index figure of prices 120. That is, per capita production increased 9 per cent while prices increased 58 per cent. It is thus seen that coincident with an advance of prices there has been an increase of production as well as consumption of agricultural production per capita of total production. It is interesting to observe that crop production, per capita of total population in the United States, is greater this year, 1912, than ever before recorded. The people as a whole have probably been better clothed and fed, in the past few years of rising prices, than ever before.

ALBERT C. WHITAKER: In discussing Professor Fisher's proposal, I may say I adopt without qualification the whole body of general monetary theory from which the scheme has sprung. I have observed that at one place in his paper Professor Fisher has followed the instincts of a good propagandist and has invited even those who repudiate the quantity theory to join with him in support of the adjustable seigniorage plan. The argument which

Professor Fisher makes to these gentlemen to show that they can, consistently with their own theories of the value of money, uphold his remedy, seems to me wholly logical even when viewed from their standpoint. But I for one should be much surprised if any but adherents of the quantity theory should ever be found in support of this scheme. It is clear the author of the plan himself conceives it simply as one which will provide for an approximate stability in the purchasing power of the money unit *merely by way of and through its effects upon the quantity of standard coin in circulation*. As propagandists we should be glad to withdraw all emphasis from the point that the *quantity of standard coin* is a factor standing intermediate between changes in seigniorage as cause and changes in prices as effects of this cause. But as critics—even as favorable critics—in my judgment we must on the contrary insist upon this very point. As a cheerful follower I accept, I think *in toto*, Professor Fisher's analysis of the relation subsisting between the quantity of so-called "primary" money and the general level of prices, and likewise his theory of the relation of the interest rate to the oscillations of prices. But the chief criticism of his plan that I have to offer, whether it be of vital importance or not, is intimately connected with the proposition that the sole way in which a change of seigniorage can affect prices is through its effect upon the quantity of standard coin, and *thus* on other forms of money, and upon bank deposits. In general I want to say I think the plan is wholly sound in principle, but I do not at all follow Professor Fisher in his assumption that the *amount* of change of seigniorage required to correct a *given* change in the price level can be clerically or ministerially determined, or even approximately so determined. Still I think the plan thoroughly workable if only men and their governments were good enough to work it. With regard to a distinct matter—the political feasibility of the scheme—I regret to say I believe it is totally lacking in political feasibility. This, of course, is not Professor Fisher's fault. I do not believe those who need to see it to make it go will ever see it. Upon this point, however, I shall not expand.

Professor Fisher appears to attach considerable importance to that feature of his proposal which provides for the determination of the amount of seigniorage change required in a given instance, as a mere clerical or ministerial act. It is, of course, undesirable that any political authority should have a *discretionary* control over the amount of seigniorage change to be made. Too many

evil possibilities are suggested by such a control. Therefore Professor Fisher recommends that a 1 per cent rise in the price level should be taken as a mere administrative mandate that the seigniorage charge should be elevated 1 per cent. In discussing what he terms, most aptly, the repercussion upon the value of gold bullion following from a change of seigniorage, Professor Fisher admits, or rather, points out, that a 1 per cent change in seigniorage can hardly be counted upon as the exactly correct antidote for a 1 per cent shift of the price level. But he does not make a great deal of this point, and does not appear to regard it in any sense as a sufficient reason for abandoning the ministerial character of the seigniorage regulation. It is in this connection that I desire to submit my chief criticism. I myself cannot see that there is any way of telling whether a 5 per cent rise, say, of the price level should require a 5, 10, or 15 per cent increase of seigniorage as a correction. A mere 5 per cent increase of the seigniorage, I should think, might prove of so little avail quantitatively that if we were to confine ourselves to such a change, that is, one merely equal to the change in prices, the whole scheme would hardly be worth the trouble it involves. To take a strong case for the sake of argument: suppose prices in an isolated country rise 25 per cent. We raise the seigniorage say 25 per cent. What events follow? (1) First the government's buying price for *fine gold bullion*—known now as the mint price of gold—falls to \$16.536 per ounce. With the proposed 1 per cent “brassage” charge, the government's selling price would then stand at \$16.70, and the *market price* of gold bullion would necessarily fall to a point somewhere within these margins. (2) The money cost of production of the products of gold, such as rings, watch-cases, chains, dental gold, etc., and the market price of these products, would fall. (3) The sales and output of these things would expand—to an unknown degree. (4) More gold would therefore go to the manufacturing arts uses, and less to make coin. The quantity of gold used in the arts would necessarily expand until the social demand price falls to \$16.53 per ounce (I must be brief and therefore must use some of our technical terms). Will this deflection of gold from the monetary use be just sufficient, or even *approximately* sufficient, to raise the purchasing power of the money unit by 25 per cent? There is no means of telling. If the quantity of gold required to drive the social demand price of arts bullion down to \$16.53 per ounce is very large, a very large amount of

gold will be deflected from the monetary use, and a very large *relative* reduction in the number of dollars will be occasioned. Then a comparatively great effect on the value of the money unit or prices may be expected. If the quantity referred to is small, a comparatively small effect upon prices may be looked for. To summarize: the extent to which a given change of seigniorage will affect the general price level depends upon the elasticity of the demand for the gold bullion as commodity, the elasticity of the demand for gold as money, and also the existing proportion between the arts fund and the coinage fund, and finally upon the effect in the fall of the value of gold—as disturbed by the readjustment between the arts and money uses ensuing from the seigniorage change—upon its production. Raise the seigniorage charge enough to cut the price of gold—namely the number of money units per ounce for which it exchanges—in half. This might increase the arts use of gold by 60 per cent. Who knows? On the assumption that the existing quantity of gold devoted to the money use is twice that devoted to the arts use, this would in time reduce the quantity of coin by 30 per cent of itself. This ought, *ceteris paribus*, to raise prices about 30 per cent according to Professor Fisher. But even granting this, it is apparent that the amount of effect of a given change in seigniorage is dependent upon the elasticity of the demand for the commodity gold. This, without saying anything as to the reaction of the whole on gold production. I may be wrong, but I think the assumed substantial proportionality between seigniorage change and consequent price level change (or correction), would be likely to prove so far away from what we should actually experience as to suggest strongly the abandonment of the ministerial or clerical determination of the seigniorage. Changes in the price level could be followed up and corrected, I think, only by seigniorage changes to be found experimentally. If sound, this is not necessarily a vital criticism of the plan as proposed. But it would certainly reflect to a degree upon its political expediency. I believe we should have to choose between a ministerially determined but very inadequate correction, and a substantially adequate correction determined upon by a commission allowed a certain latitude of judgment.

A few more observations: Professor Fisher has anticipated the difficulty of speculation in gold bullion under the plan when in operation, and has met that difficulty as well as it can be met. I should suggest that the brassage charge be made perhaps 2 per

cent, to allow a greater latitude in seigniorage changes. This would entail the evil that the range of fluctuation of our rates of exchange—even while the seigniorage charge remains unchanged—would be widened considerably.

Professor Fisher has suggested that the plan might be put in operation in the form of an extension of the system of the gold exchange standard. He supposes that Austria might make its home money stable—in purchasing power—by a variable seigniorage, while other countries might maintain their own money units in a fixed value relation with the Austrian unit by the new established devices of the gold-exchange system. Why not make it Switzerland, or the republic of Andorra? Is not this a little too enthusiastic? A sufficient pumping plant might maintain a constant pressure in the water mains of a given city, by keeping the water in a standpipe at a given elevation, say 200 feet. This would be quite as feasible with a standpipe 25 feet in diameter as with one 50 feet in diameter. But it could not be done with a 6-inch standpipe. The commerce of the great nation with too small a country would not have the capacity, if I may so express it, to carry the exchange operations involved in the plan as an extension of the gold exchange standard. No one could be more competent to discuss and weigh this factor of the size of the chosen central country than Professor Fisher, but just because it might plague him I want to point out that he has enthusiastically neglected it in his *Purchasing Power of Money*. But apart from this less serious matter, it appears to me the only method to be recommended for putting Professor Fisher's general plan for an adjustable seigniorage into effect, would be to have an international agreement between the leading nations providing for equal and simultaneous alterations of the seigniorage charge in all, determined upon the basis of a world's index number. For one country to go it alone would give it a standard of deferred payments superior to that of the others, but would tremendously increase the fluctuations of its exchange rates over long periods of time. Whether the good would outweigh the evil, would require at least another ten minutes to discuss.

WILLARD C. FISHER: The subject announced for discussion this afternoon is an important one, so important, indeed, that I am unwilling to see the session close without more reference to it. Of course, the subject broached by the principal speaker and dis-

cussed by those who have followed him is also important. In point of scientific interest, and perhaps in practical importance too, it approximates the announced subject. Certainly it deserves all the attention which these able men have given to it; and certainly I have no prejudice against it as a theme for our consideration.

But the mere fact that the rising cost of living, a topic of absorbing scientific and practical interest in itself, was announced for discussion this afternoon warrants me in turning your attention to it for a part of the brief time allotted me. I will even go so far as to say that, with a full appreciation of all that may be said about stabilized dollars, I still regret that this session could not have been given to the other subject as announced, the rising cost of living. I am sure that a free discussion among us here would have done much to clear away confusion, even from the minds of trained economists.

For it has seemed to me that sometimes even we have allowed ourselves to be influenced too much by the careless thought and speech of the man in the street. This, it is said, is a time or condition of rising prices and increasing costs of living. And sometimes we appear to set about explanations and remedies as if the problem were fairly before us in brief general terms of rising prices and increasing costs. Yet not in either or in both of these phrases is the problem stated with quite all helpful precision and fullness.

It is not likely that such men as gather in these meetings cover any real confusion of thought under the term, rising prices. We usually are clear enough in our understanding of a rise of general prices, as these are shown in some of the recognized tabular computations.

But as to cost of living, do we not at times slip into the "practical man's" position and allow ourselves to think of the present rising cost as general, as a hardship weighing upon all classes? Careful observation shows us that it is not so; and sound reasoning proves that it could not be so.

But even if we keep our thoughts of rising and increasing costs of living alike free from error and vagueness, we may still miss clues through failure to note all sides of the present economic situation, of which rising prices and increasing costs of living are but parts, albeit very important parts.

Let me indicate, then, the essential features of the economic

situation which the world is trying to understand, at least the features as I see them and as I believe that a free discussion here would have given them something like authoritative recognition.

After a long period, twenty years or more, of falling prices, the world at large has now for some sixteen years seen a persistent rise of general prices, broken to be sure a few times by brief falls, but not yet showing any serious evidence of coming to an end. Not all prices have risen. Some, especially among manufactured goods, have even fallen. Some have risen not at all, or only a little. Others, particularly those on raw products of the farm and forest, have risen a great deal, even doubling. Among securities, bonds, both public and private, of a given intrinsic goodness, have fallen. Reputable stocks have tended generally to rise.

Productive industry generally has enjoyed a very notable prosperity. While the services rendered by most classes of employees are more highly rewarded than they were, most contractual incomes have risen less than the average of goods. Wages have lagged behind goods the least, salaries the most. Independent incomes, on the other hand, have risen much, and in great numbers of cases, especially in the higher reaches, have more than matched the average rise of prices, whether of goods or of services. The prosperity of independent businesses has been so strong that a financial shock as severe as the crisis of 1907 had only the effect of a temporary retardation.

While such changes of prices and incomes have meant a well-nigh universal increase in the formal or money costs of living, the increase has been of vastly different significance for different classes. The great body of working people, salaried and on wages, have found their incomes rising less than the average, while their larger objects of expenditure, foods chief among these, have risen more than the average. These very numerous classes, then, have experienced great hardships. Some few, likely, have neither gained nor lost. Beyond these are numbers, quite large and very conspicuous and influential, by way of example and otherwise, whose incomes have outstripped far the rise in general prices. These, accordingly, have been able to enrich their living, here and there, all the way up to the greatest heights of luxury and extravagance.

If such be a fair, although hurried and rough, account of the economic conditions which face us, it is clear enough that many of the explanations, including some which have been considered

gravely in former meetings of this Association, are not at all acceptable. For in order to be acceptable as explanation, a force must not only be naturally fit to produce the result or condition to be explained, but also be present in appropriate times and magnitudes.

The minority of the recent senatorial committee of investigation make much of tariffs and monopolies as causes; and we democrats must blush for their lack of insight. Not the mere existence of tariffs, low or high, can account for changing prices, but only changing tariffs; and a long-continued rise of prices in America and in the world at large could be explained only by repeated elevations of duties in our country and over the world. And such elevations, of course, there have not been. It is worth noting also in passing that, in this country at least, imported commodities show about the smallest rise in price.

And it is much the same with monopoly. There is no correspondence in time between the spread of monopoly and the rise of general prices; far from it. Nor is there better correspondence between monopolized goods and those rising most in price. Few things have risen more than the raw products of the farm; few have risen less than refined oil and sugar.

But for tariffs and monopoly, as also for many other influences, an established alibi is not the only defense. Doubtless tariffs and monopolies do affect the prices of the particular goods taxed and monopolized; but they can have no effect whatever, as tariffs and monopoly, upon general prices. Whatever amount the purchaser must pay the more for certain goods because of the duty or the exactions of the monopoly, that same amount he has the less with which to demand other goods. No; not monopoly, nor tariffs, nor any other like special influence can raise general prices, at least not until you can take more from a man and leave him no less, or until two men can mount into the sky by rising alternately one above the other on a seesaw.

Extravagance, too, must be rejected, and for similar reasons—and for others. Extravagance there is, to be sure, in American life, greater extravagance than ever before; and its appearance and spread do correspond pretty well with the period of rising prices. But it appears, where it does appear, more as a result of rising prices and related movements than as a cause. And it does not appear in the lives of the millions who find it ever harder and harder to make the two ends meet, even while they deny

themselves staple comforts; although it does doubtless appear in the increasing importations of diamonds and like high luxuries. Nor does its effects appear widely in prices, when the great staples of common use rise most and luxuries rise much less, when corn meal and rye flour rise more than wheat flour and when pickled side pork rises more than steaks and roasts of beef. If a man cannot otherwise be persuaded that he is not lifting himself by his boot straps, he should at least heed the fact that the straps are not pulled taut.

And much the same it is with numbers of other causes or explanations of the rise of prices, numbers so great that I cannot take time even to mention them. One after another they fail, at one point or another. Some cannot be traced at the proper time; some cannot be traced in the proper fields of industry; some are purely local; some would reverse true relations, coming up as causes when they really are results of rising prices; many fail for the mortal defect of being only special in their bearing and having no power over general prices.

There is, however, one force which is adequate to produce the world's present industrial condition. I mean the world's greater and ever increasing supply of gold. This began and it continues at the right times and in the right amounts. It is world-wide in the natural reach of its influence; and it works naturally upon all classes of goods and other values.

I do not suppose that nothing needs to be said but the one word, gold, and that by this one magic term all difficulties are dissolved at once. Indeed, the term itself is elliptical: it is intended to suggest the various media of exchange of the modern world, which have been analyzed so well by Professor Fisher, and which depend directly or indirectly upon gold. But I do mean to say that, with this interpretation of terms, there is nothing in the present industrial situation, either as I have sketched it or as it might be described in more careful and fuller detail, which is in conflict with the theory of a paramount influence of gold in bringing about the present rise of prices. Indeed, I would even say that the present situation is just what orthodox economics has taught us to expect under such an influence.

Time does not remain for me to say much in criticism of the paper of Professor Fisher. Some of those who have preceded me have not been quite correct in their understanding of his proposals and quite fair, therefore, in their criticisms. But I shall leave it

to him to answer these. And my own comment must be limited to a brief suggestion of two or three points.

In the first place, the plan is not to be considered except upon the basis of an international agreement, and this would be very difficult to establish and maintain. It would not do for any one nation to adopt thus a distinct monetary standard and system. Whatever domestic advantages might flow from the more stable standard would have to be weighed against the very serious disadvantages of a broken or lost par of international exchange and the consequent disturbance of all international trade. Upon this I need not enlarge at all; for we are here upon a ground that is entirely familiar to us all.

This necessity for an international acceptance of the proposed scheme would increase materially the difficulties of establishing and continuing the policy; but very real difficulties there would be even within one nation. It has seemed to us all a very simple matter to draw up a table with which to show the movements of general prices and of the value of money. But this is because, as it were, we economists have been allowed to amuse ourselves in this task. Since no practical consequences were to follow, nobody has felt moved to object to any particular table which anybody has thought fit to prepare. But we may be very sure that just as soon as it appears that a table of general prices is to have important financial consequences for men in various relations just so soon a multitude of influences, some shrewdly intelligent and some not, will be set at work to shape the table this way and that. For this reason, and other reasons connected with it, the administration of the new policy will not be the simple matter of clerical routine which Professor Fisher assumes it to be.

As I have already taken my full time, or more, I cannot even mention some other practical objections to the interesting scheme. I can only say in the briefest of general terms that, in the commonly contrasted meanings of the terms, the scheme is based upon theories quite sound but there are practical difficulties in the way of its realization which are so great that it is not to be taken seriously.

O. M. W. SPRAGUE: I agree with Professor Whitaker that there is no exact relationship between a given seigniorage charge and changes in the level of prices; but on that account I am unable to follow him in his general acceptance of Professor Fisher's plan. By means of successive additions to the seigniorage, no doubt the

level of prices could be kept from advancing upward indefinitely. Gold mining would become less and less profitable and the stock of gold coin in the world would increase less rapidly than at present. The numerous influences causing changes in price levels over short periods of time would not, however, be removed and they would be offset to an unpredictable but probably very slight extent. To offset immediately and automatically such price oscillations seems to be Professor Fisher's primary purpose. If this will not be accomplished under his plan, it is clearly unnecessarily complicated, with its frequent succession of seigniorage changes. A contraction in current gold production could be brought about far more simply and directly and in a way which would be entirely adequate to take care of long-continued price tendencies. An international agreement, under which a tax of 5 per cent would be imposed upon all gold brought to any mint for coinage, would make gold production less profitable. If this tax should prove insufficient, it would be a simple matter to raise it to 10 per cent or whatever rate should prove necessary for the purpose in view. A plan of this sort might be expected to appeal to statesmen in many countries, because it would bring in a moderate amount of revenue.

B. M. ANDERSON, JR.: I should like to take up three or four unrelated points which have been suggested by the discussion so far. First I wish to challenge Professor Willard Fisher's contention that neither monopoly nor extravagance has anything to do with higher prices. His argument is, in brief, that if we pay more for a monopolized article we have less to pay for other articles, and so the price level remains unchanged. And he offers a similar argument in the case of extravagance. Now qualitatively he is doubtless correct. There is a tendency in the direction he indicates. But quantitatively there is no tendency in the direction of lower prices which is as strong as the tendency toward higher prices caused by monopoly or extravagance. The price level is concerned with *average* price per *unit* of goods, not with the aggregate sums paid for total stocks of goods. The monopolist gets more per unit, but does not get proportionately more in the aggregate. Rather, he sells a smaller amount of goods. Monopoly means a lessened social output, as well as higher unit prices for monopolists. And a smaller aggregate of goods, other things equal, will be sold on a higher price level. Similarly, extravagance means less saving, which means less additions to capi-

tal, or even a decrease in capital, which means a smaller volume of production, which means higher prices. The problem of rising prices is by no means exclusively a monetary problem. A price is a ratio between two values, the value of money not only, but also the value of a commodity.

Because I am *not* a quantity theorist, I am disposed to believe that Professor Irving Fisher's plan of stabilizing the dollar might be feasible. If he put it on a quantity theory basis, and tried to raise the value of the dollar by charging a real seigniorage, and so checking the increase in the number of dollars, I should be very sceptical. But his plan is not a real seigniorage plan. The coined dollar is *interconvertible* with the gold bullion, and you can always get your bullion back. I believe that by putting more bullion behind the coin you can *ipso facto* raise the value of the dollar, and consequently lower the level of prices. But I do not see how, on the basis of the quantity theory, you could be sure of getting any definite result by Professor Fisher's plan. Because to reduce the price level, on that theory, to any given point, you must *first* reduce the number of dollars by a given number. How much, if at all, would a new ratio between coin and bullion reduce the number of dollars? Men, knowing they could get the bullion back on demand, might continue to coin almost as much as before. Of course a given amount of new bullion would make slightly less dollars. If the value of money were not directly changed by the new ratio, as much money would be needed as before to exchange a given value in goods. There would be some increase in the demand for gold in the arts, but just how elastic the arts demand for gold is we do not know. So far as the quantity theory can assert, the new equilibrium between arts use and money use of gold might be reached long before the money supply had been reduced enough to change the price level to the point desired. Or, if the arts demand is very elastic, too many dollars might be drawn off. We have neither statistical nor deductive laws as to the degree of elasticity in the demand for gold in the arts.

Two difficulties present themselves in connection with Professor Fisher's plan: one, already mentioned by Professor Fisher himself, is that it will not provide for a continued appreciation of gold, if that should come about again; the second is that the whole burden of the depreciation of gold will fall, under his plan, on the government. Whoever holds a depreciating commodity

loses thereby. Professor Fisher does not stop the depreciation of gold; he simply shifts the burden. There is a scheme—not original with me—which would, I think, obviate both of these difficulties, and gain all that Professor Fisher is seeking. And since our discussion is probably one of academic possibilities anyhow, I shall mention it. Why might not there be an international agreement to take over the gold mines of the world, monopolize the output, and so control the value of gold much as the private monopoly of diamonds is doing? This would provide for both depreciation and appreciation. And, unless it were unlike most monopolies, it would be profitable rather than a burden to the governments that went into it. I do not speak with great certainty, but my impression is that England and the United States alone have enough gold mines within their territories to put the plan into effect. Possibly Russia might have to come in.

One further point of a theoretical nature. Professor Fisher says that the dollar is not a unit of value, but merely a unit of weight; so many grains of gold. He holds that to get a unit of value you must turn to a composite unit of commodities. But this, I would suggest, is subject to the same criticism. It is also a bundle of physical units, defined as so many pounds, yards, and gallons. Its definition would have to be in terms other than value. He will have to dig deeper to find a unit of value. I would hold that either is a unit of value, that the unit of value is anything which you arbitrarily choose, which possesses value, just as the unit of length is anything possessing length which convention selects. By value I mean an intensive quality, that is, a positive quantity, and not a mere ratio of exchange. And I do not know what "unit of value" might mean anyhow if value be, as Professor Fisher seems to conceive it, a ratio of exchange.

R. R. BOWKER: One great fact seems to stand out from discussion such as this, that the world is growing richer both in total product and per capita. It is not lowered production, but unsatisfactory distribution, that is in question. It is not the "bloated bondholder" who gets the surplus, for we have just been shown that the price and return of bonds taken together have not kept pace with the normal rate of interest or normal advance in values. At the other end of the scale, the wage earner has in some trades benefited, and in other trades not benefited adequately, by an increase in wages; and this does not depend upon trades union con-

ditions, because there has been notably an increase in the wages of domestic servants, who are not organized. I have myself, as a working economist, practical touch in executive relations with businesses of distinct kinds, one in publishing and printing, another in manufacturing and farming interests, and a third in manufacturing and engineering interests; and I find it difficult to make any generalizations as to increase in wages. In printing and publishing, the wages of type setters have largely increased, but this has been offset by the development of linotype and like machinery; the price of paper has lowered rather than increased; and books as well as newspapers have not been increased in price, though a larger margin of profit has come from the larger sale of books since the international copyright act was passed twenty years ago, and the circulation of newspapers has enormously increased. The real pinch has come upon those of the middle class, under salary, whose incomes have increased slightly or not at all, and who must face the higher cost of living without compensating return. I have in mind the injustice to an employee of my own, who for years earned \$2000 where he should have earned \$3000, but where his salary could not be increased in proportion with others without abolishing the margin of profit and practically putting a stop to the business. Now, it is largely because of the change in the purchasing value of the dollar that such injustice exists. In fact, the whole statistical question hinges on the lack of an absolute standard, and the difficulty that it is not easy to find such a standard should not prevent our seeking one. We measure from sea level, because with one coast receding and another lifting there is no standard on land, and in the sea itself we have the ebb and flow of the tide. We therefore have to find a standard in mean sea level, which does not exist, but which nevertheless gives a practically constant datum in reckoning heights. Measure of length, even as determined by the wave length of light, has similar difficulties. It is most of all important in economics and practical business that there should be found some standard of value which is stable, and from which can be measured the ups and downs of prices to emphasize the obligation under which we should all feel for just such work as that illustrated in the paper on which this discussion is based.

E. W. KEMMERER: Professor Fisher's plan is an ingenious one, and is well worthy of careful consideration.

The most serious objection to it, I believe, is one that has been

touched upon by several previous speakers. It is that its adoption would demoralize the international exchanges. The plan would drive a wedge, as it were, between the gold points. Gold would not be imported to any extent until the government's mint price were effective and exchange had declined below that price by sufficient to pay shipping expenses. Gold would not be exported to any extent until the redemption price had become effective and exchange had risen above that price by sufficient to pay shipping expenses on gold exports. Every substantial change in the size of the bullion dollar would cause a great disturbance to the foreign exchanges. If these changes were anticipated, as they doubtless would be, they would cause heavy speculation for a rise or fall in exchange, with resulting influences upon foreign money markets and the international security market. This speculation would assume the form of forward contracts for the purchase and sale of exchange, a form of speculation that would require comparatively small amounts of ready funds on the part of large speculating interests. Arbitrage transactions are today carried on for very slight differences in exchange, as small sometimes as $1/32$ or even $1/64$ of one per cent. With the prospect of a rapidly and continually rising bullion dollar, which would probably frequently confront speculators, I should expect excessive speculation in the exchanges, somewhat similar to that which took place in the Straits Settlements in the early part of 1906 when they were "raising" their dollar.

Exporters and importers working on small margins of profit frequently need to fix their exchange contracts for many months in advance. I have known it in an extreme case to be fixed as much as two years in advance. Professor Fisher's plan, if really adequate to meet gold depreciation, would bring in some years almost as much uncertainty in long-time forward exchange contracts as exists in the gold exchanges in silver standard countries. This uncertainty would be demoralizing to legitimate foreign trade.

Of course an international agreement to adopt the Fisher scheme would meet this difficulty. Considering, however, the world's experience in connection with the far simpler proposition to secure an international agreement for bimetallism, I fear that the hope of securing a comprehensive international agreement on this scheme is visionary.

One other point I want to mention in closing. It is that the essential features of the scheme for stabilizing the unit of value by a variable seigniorage charge were proposed in England about

twenty years ago. A proposition was made before the Herschell Commission to stabilize the gold value of the Indian rupee by means of a variable seigniorage on silver (section 139); and at about the same time Aneurin Williams,¹ proposed to remedy the evils of an appreciating and fluctuating unit of value in England by varying the seigniorage charge on gold in accordance with the movement of price index numbers. The scheme is described in the *Economic Journal* for June, 1892, under the caption "A Fixed Value of Bullion Standard." A later article by Robert Griffen in the same volume of the *Economic Journal* (p. 462) criticizes the scheme—some of the criticisms being the same as those advanced here today.

PROFESSOR FISHER, replying to objections: It is difficult in the space of a few minutes to answer fully the various objections which have been raised. I quite agree with Commissioner Neill that before any such plan as I have proposed can be actually enacted we need "much more information." My hope is that it may have a hearing before the proposed International Conference on the High Cost of Living. While it is probably too much to hope that it will actually be endorsed by such a conference, and afterward actually adopted by the nations of the world, it is not impossible that its discussion may lead to a general agreement as to the desirability and feasibility of stabilizing the dollar.

I am sure I am under no illusions as to the possibility of the early adoption of any plan to standardize the dollar. This may require centuries, but I hope that the present generation of economists may, at any rate, lay the foundations by threshing the subject out.

The objections which have been raised can all be fully answered and most of them, such as those raised by Commissioner Neill, are due to a lack of knowledge of what the plan contemplates. I think the main objection Commissioner Neill suggests—that those who make up the index numbers would be very unpopular because they affect the burden of debts—is wholly imaginary. There would be some ground for this objection if the proposal were to adopt the old "tabular standard" by correcting money payments

¹ The article by Aneurin Williams was not mentioned at the Boston meeting. The writer discovered it a few days after the meeting, and because of its important bearing on the subject, has taken the liberty to insert this reference to it in his remarks.

E. W. K.

through the addition to or subtraction from the debt of a certain number of dollars. Under these circumstances the extra dollars paid or the dollars from which the debtors were excused would stand out definitely in the public mind and would be a subject for debate and possible discontent, but when the tabular standard is merged in the actual money of the country the ordinary debtor and creditor would be as unaware of how his interests had been affected as he is now unaware of how his interests are affected by gold depreciation. It would still be true that to the ordinary man "a dollar is a dollar."

The contrast between the complaints which might arise under the ordinary tabular standard and under the proposed plan is the contrast between complaints under direct and under indirect taxation. The ordinary man feels and complains of direct taxation, but even the economist cannot raise him from his lethargy enough to make him complain against the outrages of indirect taxation. Even the "Chamber of Horrors" in New York, designed to show how the tariff taxes the consumer, made comparatively little impression; and it has required several generations to bring the American consumer up to the point of protesting against a high tariff. Moreover, even this protest is largely based on the recent general rise in the cost of living mistakenly attributed to the tariff as the chief cause.

The truth is that if the monetary system which I have proposed were once adopted there would be very little attention paid to what "might have been" if some other plan or index number had been in use. Few besides the jeweler and the miner would be vitally interested in the changes in the government prices. An actual illustration is found in the fact that the average Philippino or the average inhabitant of India has had no real conception of the vital changes which have been wrought in the purchasing power of his money by the adoption of the "gold exchange standard" if indeed he ever heard of it, and no discontent has come from the contrast between what his purchasing power is and what it would have been, had the silver standard been retained. In fact we do not need to seek so far for an illustration. As I have hinted, we may illustrate the point by the difficulty today in making the average man realize that the depreciation of gold has affected the interests of creditor and debtor. We economists may calculate this out and show by index numbers that the bondholder has not really been getting any interest but the ordinary man who believes

"a dollar is a dollar" takes little stock in the proposition and if he finds any fault at all with rising prices he vents his wrath not upon the gold mines or the expansion of deposit banking but upon the luckless trusts, the middlemen, the tariff, trade unions, etc.

The savings bank depositor during the last fifteen years has been defrauded of all his interest but he does not yet appreciate either this fact or its cause.

If, then, we cannot get the ordinary man today really excited over the fact that his monetary standard has affected him to the tune of some 50 per cent of his principal of fifteen years ago, it does not seem likely that he could get excited because some one tells him that the index number used in the "compensated dollar" plan robbed him of 5 or 10 per cent as compared with some other possible system.

Furthermore, we must remember that the inclusion or exclusion of any particular commodity in the index number would seldom have as much as 1 per cent influence in the total. It would doubtless be difficult at the outset to secure agreement on the best form of index number, but even this difficulty would be more a technical dispute among experts than a quarrel over debtor and creditor interests. The index number would of course be settled in advance of its use and it would be difficult for these classes to foresee where their interests lay. Both would be willing to let the experts decide whether or not, for instance, rye and leather should be in the index number; for in an index number of one hundred commodities the inclusion or exclusion of one or two commodities could scarcely ever affect the result by as much as 1 per cent, and even this effect could not be foreseen.

As to Professor Kemmerer's objection that the adoption of the plan by one nation would derange the international exchanges, I quite agree with all he says. For this reason I should not advocate the plan for one nation alone, but should advocate it only under international agreement.

One gentleman who does not believe in the quantity theory has asked how raising the weight of a virtual dollar would tend to contract the currency. I answer, first, that it would do so by at first diverting gold from the mint where it was confronted by a reduction in price into the arts or to countries where the price had not been changed, and, secondly, that the increase of weight, if sufficient, would encourage the redemption of money in bullion.

To take an extreme illustration, suppose the dollar were sud-

denly made a ton of gold. We can imagine that the holders of dollars so redeemable would rush to redeem. Jewelers would stock up in gold when they would get a ton for every dollar certificate or greenback in their possession. This would certainly contract the currency.

As to the objection that the plan would be extremely costly to the government, I may say that this is, curiously enough, the opposite of the objection which has often been raised, namely, that the plan would be so lucrative to the government as to be a constant temptation to coin the seigniorage. As a matter of fact, I do not think there is any truth in either objection. The objection that the plan would be costly goes on the assumption that it would be necessary to maintain a 100 per cent reserve. This, perhaps, is required so long as the paper which represents the gold is in the special legal form called "certificates," but it would be easy, of course, to substitute a different form of certificate or note entitling the owner of it not to 25.8 grains of gold for each dollar of paper, but to such an amount of gold as would be determined by the operation of the system, and not requiring that a 100 per cent reserve should be kept. It might be prudent to require at least a 50 per cent reserve to be kept. But it would require many generations before the 50,000,000 ounces of gold now in the Treasury would constitute less than 50 per cent reserve and so require replenishing. Until then there would be no cost to the United States.

Besides this, there is to be reckoned with the fact that whenever the government buys and then sells or sells and then buys gold, it makes a profit in either direction and this profit would add to its reserves.

Another consideration is this. As soon as the system is really adopted it would unavoidably be suggested, especially as soon as it became costly, that all gold coins in circulation, being mere tokens anyway, should be recalled and converted into paper, the gold being then added to the gold reserves. The use of gold coins is an extremely costly and uneconomic arrangement, and the only reason for not providing for their recall at the very beginning is not to run counter to the prejudices, especially in England, by which they are kept in existence.

Of course, we seldom get good things in this world without paying some price for them, but it seems to me that this would be a case of a bargain counter price, the result being inestimably precious, and the price being extremely low.

It has been objected that to increase the weight of the dollar 1 per cent would not necessarily offset exactly a 1 per cent rise in prices and that consequently if, during a series of years, prices had risen 50 per cent, this rise could not have been prevented by the system which I have proposed, which would, it is said, have necessarily implied an increase in the weight of the dollar of exactly 50 per cent. This objection is based on a misunderstanding. While it is true that I have suggested that a 1 per cent *deviation from par* should be the signal for a 1 per cent change in the weight of the dollar, this does not imply that a 1 per cent quarterly rise in prices would require a 1 per cent quarterly increase in the weight of the dollar, because it does not imply that a 1 per cent change in the weight of a dollar causes an exact change of 1 per cent in the general level of prices. This will be clear if we take an example. Let us assume that prices tend to rise 1 per cent every quarter and let us further assume that a change in the weight of the dollar of 1 per cent represses this upward movement of prices only by $\frac{1}{2}$ per cent. We shall see that the system will require a quarterly change in the weight of the dollar not of 1 per cent but of nearly 2 per cent. If we consider the price level at first, as 100 per cent, at the end of the next quarter it will register 101 per cent. The excess above par of 1 per cent is now the signal for increasing the weight of the dollar by 1 per cent. This, according to our assumption, restrains prices by only $\frac{1}{2}$ per cent, so that at the end of the next quarter the price level will be $100\frac{1}{2}$ per cent plus the assumed quarterly increase of 1 per cent or $101\frac{1}{2}$ per cent in all. It will now be observed that the signal for raising the weight of the dollar stands not at 1 per cent but at $1\frac{1}{2}$ per cent. Accordingly the weight of the dollar being increased by this amount and repressing the price level by one half as much, that is, $\frac{3}{4}$ per cent, will result at the end of the next quarter in a price level of $100\frac{3}{4}$ plus the usual rise of 1 per cent, or $101\frac{3}{4}$ per cent. The signal now stands at $1\frac{3}{4}$ per cent and the application of such an increase in the weight of the dollar will, by the same reasoning, result at the end of the next quarter in an index number of $100\frac{7}{8}$ per cent and so on indefinitely, the index number always being 100 plus a fraction of 1 per cent but never rising as high as 102, unless in some quarter a greater rise than 1 per cent should occur. The result is still clearer if we assume that the price level should at any time reach 102 per cent and that thereafter it should tend (except for the

effect of the compensated dollar) to rise 1 per cent quarterly. Since the price level stands at 102 per cent, the signal is for an increase in the weight of the dollar of 2 per cent. This, we suppose, would only repress the price level by 1 per cent, so that at the end of the next quarter it would stand at 101 per cent plus the usual 1 per cent rise, or 102 per cent as before. We should therefore now increase the weight of the dollar by 2 per cent again, and so on indefinitely, the result being to maintain the price level always at 102 per cent. Therefore, if, in a series of years, the price level would have risen without the operation of the system by 50 per cent, it is evident that the system would have secured an increase in the weight of the dollar of fully 100 per cent and would have kept the price level actually within 2 per cent of par.

BANKING REFORM IN THE UNITED STATES

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Five years have passed since the panic of 1907 gave such a renewed impetus to the movement for banking reform as to cause a widespread expectation that a thoroughgoing reform soon would be effected. Aside, however, from the avowedly makeshift provisions of the so-called Aldrich-Vreeland Act, which expires by limitation June 30, 1914, and under which not a dollar of bank notes has yet been put into circulation, no legislative reform of consequence in our national banking system has been accomplished. In this statement I would emphasize the words *legislative* and *national*,—the first, because I would not belittle the reforms accomplished by the banks themselves through clearing house examiners, and the even greater reforms accomplished through the vigorously efficient administration of Comptroller Murray; the second, because I would not belittle the banking legislation enacted in many of our states since the panic of 1907.

In January, 1911, a tentative plan was presented to the public by Senator Aldrich, for criticism and suggestion. After nine months of discussion, the plan was resubmitted in a revised form in October; and, finally, in the shape of a third revision, it became the unanimous recommendation of the nonpartisan National Monetary Commission. A vigorous campaign of publicity and education has been waged for two years in support of the plan by the American Bankers' Association, the National Citizens' League, and other organizations, and large sums of money have been spent in the work of propaganda, yet advocates of banking reform are much less optimistic now¹ than they were two years ago. No political party, large or small, in the recent national campaign

¹ Compare for example the attitude taken by the American Bankers' Association on the Aldrich plan at its annual convention of 1912 with that taken in the convention of 1911. Mr. George M. Reynolds voiced a common sentiment among bankers, in his address before the 1912 convention, when he said: "If, however, any of you see anything in [the banking reform planks of the three great political parties] to encourage bankers in an honest effort to help provide a proper system of banking and currency . . . I should be glad to have you point it out." *Chronicle, Bankers' Convention Supplement*, September, 1912, p. 163.

put a plank into its platform advocating the National Monetary Commission's plan or anything resembling that plan. The Republican platform ignored the plan, probably in part, because it was the desire of the leaders to keep the question of banking reform out of the political arena. The banking planks of the Progressive party and the Democratic party admitted the need of banking reform but both declared their opposition positively to the so-called Aldrich plan. Probably no class of people in the community would benefit more from an adequate and sane banking reform than would our farmers, because their needs for currency and credit vary greatly with the seasons, and to them the seasonal inelasticity of our currency and bank credit is a continual and serious handicap. Currency and credit are scarce in the fall when the farmers need them most; and prices are most depressed by a stringent money market at the very time of the year that the farmers have most to sell. Yet throughout the country farmers have been generally either surprisingly indifferent or hostile to the Monetary Commission's plan.

One explanation of these facts stands out so prominently as to overtop all others. It is not disapproval of the functions assigned to the proposed National Reserve Association. Most people who have given the subject serious thought believe that any effective reform will require the assignment to some institution or institutions of a substantial part of the functions assigned to the National Reserve Association. Nor is the great obstacle fear of political complications. In the literature of opposition to the Aldrich plan, suggestions of this danger which proved so real in the case of the First and Second United States Banks, and which have played such an important rôle in subsequent agitation for a central bank, have been conspicuous for their comparative neglect. The great obstacle to the reform has been the fear that the National Reserve Association would be controlled and selfishly exploited by large financial interests. This fear was much strengthened by the facts that the plan seemed to many to be linked with conservative politics at a time when the *Zeitgeist* was strongly progressive, and that it bore the same name as did a most unpopular tariff act. The fact, moreover, that the plan of organization of the National Reserve Association is so complicated that few can or will understand it, places upon the plan a tremendous handicap when submitted to a public ultrasuspicious of financial interests because of recent abuses, and

hypersensitive because of fretting over the increasing cost of living.

Exploitation by special interests is feared because of two conditions: first, that the control of the proposed institution was to be put so largely into the hands of a special class in the community, that is, bankers; and, second, that among bankers themselves the real control might fall into the hands of those particular interests loosely characterized as "the money trust." The first danger I discussed at some length in a paper read at a meeting of the Western Economic Association a year ago,² and, with your permission, I will briefly summarize the conclusions there made by adapting a few passages from that paper:

Is not the National Reserve Association too much of a public institution to be so largely controlled by one type of business interest, that is, that of the banking fraternity? We must get away from the prevalent idea that the National Reserve Association is to be principally a banker's affair just because its capital is to be furnished entirely by banks. We must bear in mind that its public deposits alone will for some time probably exceed its paid-up capital, that the funds which the banks deposit with the Association will be chiefly those which the public has deposited with the banks, and that the paper which the banks rediscount with it will be that of the business community. We must not forget that the National Reserve Association is to have a tremendous public power and responsibility, through its right to fix the bank rate of discount, its power over the foreign exchanges and gold shipments, its right to issue the country's only elastic paper currency, its supervisory power over banks, and its function of holding a large percentage of the country's reserve money, together with the privilege of having its promises to pay, in the form of its deposits and bank notes, counted as lawful reserve money for banks.

Now it is possible, although by no means certain, that the interests of bankers as a class and those of the public are identical. It is certain, however, that history furnishes numerous instances in which what the public believed to be its interest and what bankers believed to be theirs were in conflict. One need not go back farther than the last two or three years to find a striking instance of the kind in the United States. I refer to the movement leading to the establishment of the United States postal saving depositories, which was opposed vigorously and almost unanimously by the banking fraternity.³ It is furthermore true, and perhaps of greater importance, that a large element in the

² "Some Public Aspects of the Aldrich Plan." *Journal of Political Economy*, December, 1911, pp. 819-830.

³ E. W. Kemmerer, "The United States Postal Savings Bank," *Political Science Quarterly*, xxvi (1911), pp. 474 and 475.

country believes the interests of bankers to be in conflict with those of the general public on a great many vital questions. The task of securing and maintaining a thoroughgoing banking reform is at best an arduous one, and the plan proposed must be not only intrinsically meritorious, but above suspicion. Otherwise it will have a difficult road in Congress, and if it finally gets through it will be in subsequent danger of becoming a football of politics.

If we turn to the great central banks of Europe, all of which are to a very large extent bankers' banks, we find that great care is taken to prevent them from falling into the control of the banking class of the community, or of any other special class.⁴

Not this fear of selfish exploitation in the interest of bankers as a class, however, but the fear of selfish exploitation by that group of financial interests popularly known as "Wall Street," has been the great obstacle to the progress of the National Monetary Commission's plan. The Democratic National platform this year, after specifically opposing the Monetary Commission's plan, advocated reform measures which would afford "protection" from control or domination by what is known as the "money trust;" the Progressive national platform declared that "the control [of the issue of currency] should be lodged with the government and should be protected from domination or manipulation by Wall Street or any special interests." Everywhere throughout the

⁴ In Germany the ultimate control of the Reichsbank is in the imperial government, and is exercised by two boards, the Curatorium and the Directorium. The Curatorium is composed of five members. The imperial chancellor is chairman and he appoints one other member, while the Bundesrath (the upper house of the imperial legislature) appoints three members from its own numbers. The Directorium, consisting of nine members, two of whom are the president and vice-president of the Reichsbank, are all appointed by the emperor for life. In France the governor of the bank of France and the two sub-governors are named by a decree of the president of the Republic upon the proposal of the minister of finance, upon the presentation made to him of three candidates by the governor of the bank. In England the government has no voice in the management of the Bank of England, the supreme control resting with the governor of the bank, the deputy governor, and twenty-four directors who are elected annually by the stockholders. "There is no legal restriction as to the class from which directors may be selected, except that they must be 'natural-born subjects of England, or naturalized,' . . . in actual practice the selection is confined to those who are, or have been, members of mercantile or financial houses, excluding bankers, brokers, bill discounters, or directors of other banks" operating in the United Kingdom.—"Interviews on the Banking and Currency Systems of England, Scotland, France, Germany, etc." *National Monetary Commission's Report*, pp. 9-10.

country the advocates of the Monetary Commission's plan have been put on the defensive in the matter of Wall Street domination; and the fear of such domination appears to be growing.⁵

When told that Wall Street would have no incentive to use the National Reserve Association for the purpose of exploiting the public for the benefit of the "interests," since the maximum dividend the Association can pay is 5 per cent, the sceptic replies that it is not a question of immediate dividends but of power, and he points to the familiar fact that bank stocks as well as those of other corporations often sell at prices having no relationship whatever to present or prospective dividends—prices determined by the power over other interests which control over the one in question gives.

When told that the control of the National Reserve Association even if secured would give no such power, since the corporation cannot loan to the American public, cannot buy stocks or bonds (except government bonds), and cannot re-discount paper issued for the purpose of carrying stocks or bonds, the sceptic replies that the National Reserve Association has a tremendous power over the money market in its right to fix the American discount rate, to influence the foreign and domestic exchanges, to export and import gold, and to discriminate between banks in the matter of re-discounts and direct loans.

When confronted with elaborate figures to prove that "fear of possible Wall Street control can have no substantial foundation" because of the preponderating power given to the small banks scattered throughout the country, and because "the New York district with 29 per cent of the banking resources of the country would have [but] 8 per cent of the representation on the [central] board," the sceptic replies: Through our highly developed community of interest in financial matters, interlocking directorates, etc., a comparatively few men with headquarters in Wall Street directly and indirectly control practically all the leading banks, railroads, insurance companies, and industrial corporations of the country; that these large interests can and often do force the smaller and more remotely situated concerns to do their bidding. In substantiation of his contentions, the sceptic points to some of the striking revelations now being made by the Pujo Committee

⁵ The fear has been aggravated by the recent revelations in the matter of campaign contributions by large interests, and by the investigations being made of the "money trust" by the House Committee on Currency and Banking.

in the matter of financial centralization through community of interest; and if he is an independent business man he frequently points to the strong community of interest in his own town and to experiences of his own or his friends in trying to finance some worthy enterprise not countenanced by the money power in his town or by its dictators in the nearby metropolis.

When told that under the Monetary Commission's plan as last revised banks under a unified control, either by reason of direct ownership of one by another, or by reason of interlocking directorates, are shorn of most of their power, the sceptic looks wise, smiles, and thinks of dummy directors and similar devices.

When told that this community of interest of which he is complaining has grown up under our present decentralized banking system, and that its workings would be brought out into the open and regulated in the light of publicity by carefully drawn rules if the National Reserve Association were established, the sceptic replies: Yes, the present situation is bad enough, but the interests which we most fear, and which have been guilty of the worst abuses, are practically unanimous in favor of the proposed plan. He declares that their reasons are selfish, and that the plan once adopted and supported by the strong force of vested interests would clinch for years to come this dangerous power now possessed by the few.

These arguments are not imaginary. Every one of them I have heard repeatedly in conversation and seen in the press; and some such position, whether right or wrong, appears to be that of a large and probably growing percentage of intelligent people. The pressing question now is: What is to be done about it?

Inasmuch as the criticisms which are proving to be the real obstacles to the reform are directed mainly at the machinery of organization of the National Reserve Association, rather than at its functions, we may ask: Cannot the scheme of organization and control be modified so as to meet these criticisms without sacrificing the real virtues of the plan? In other words, are not the features to which so much objection is being made really non-essential? Is not the attainment of a thoroughgoing reform of such moment as to justify large concessions, in the matter of control, to public opinion, or, if you prefer, to public prejudice? I believe these questions demand an affirmative answer, and therefore would suggest the following modifications in the plan:

That the fact that the proposed National Reserve Association

is much more than a bankers' bank, that it is a great public trustee with tremendous powers and responsibilities, be frankly recognized; and that the non-banking interests be given a much larger part in its control. This seems particularly desirable in regard to the directorate of the Central Association, which will be concerned not with narrow questions of banking practice such as deposits, transfers, re-discounts, loans, and the like, but with broad questions of policy such as the discount rate, gold shipments, the size of the reserve, amount of note issue, etc. No banker (in the English sense of the word) can be a director of that great and predominantly bankers' bank, the Bank of England. Is there any sufficient reason why we in America should depart from the practice of Europe, and in the face of widespread suspicions insist on having forty-two out of the forty-six directors of the National Reserve Association, including the governor and the two deputy governors, appointed directly or indirectly by bankers? The present plan provides for the election by the branch boards composed chiefly of bankers and elected by bankers, of fifteen directors for the central board who "shall fairly represent the agricultural, commercial, industrial, and other interests of the district, and shall not be officers nor, while serving, directors of banks, trust companies, insurance companies or other financial institutions." Is it surprising that the farmers of the country should be sceptical of a plan claimed to be particularly beneficial to them, which provides for representatives of the agricultural interests of the country on the directorate, but insists that those agricultural representatives shall be appointed by boards whose members are all elected by bankers and about five sixths of whom are bankers?

Would not a provision for entrusting to the President of the United States the appointment of one of the deputy governors⁶ and all of the non-banking directors allay much of the popular suspicion which now stands in the way of the adoption of the plan, and at the same time insure a broader and better directorate for the performance of the Association's important public functions? These government directors should be appointed for a term of six years, one third of their number retiring every two years. At least one of them should be on the executive committee.

⁶A reduction in the number of directors of the Central Association is later suggested. P. 60.

The justification for the appointment of non-banking representatives on the directorates of the branch associations is not so strong as that for their appointment on the central board, because the branch boards are more occupied with narrow banking matters and less with broad questions of policy than is the central board. If, however, the branch boards are to have members, as provided in the present plan, who are to "fairly represent the agricultural, commercial, industrial, and other interests of the district," it would seem reasonable that these members should be appointed either by the interests they are supposed to represent or by some publicly elected body or official.

They should have a substantial representation on important committees. Obviously the danger of such an arrangement is that of drawing polities into the National Reserve Association. This political danger would be reduced to a minimum if one third of the members of the branch boards, instead of one sixth as at present, were made to represent the agricultural, commercial, industrial, and other interests of the district; and if these members were to be appointed by the governors of the states covered by the different branch associations. The governor of each state should appoint at least one non-banking director; and, when more than one was needed from a state to make the number of non-banking directors constitute one third of the board,⁷ the additional ones should be apportioned to the different states roughly according to the proportion of member banks in each state. For example, in the present plan one branch is to cover the six New England states. This would mean that if there were to be eighteen directors for the New England branch, in addition to the governor of the branch, twelve would be elected by the local associations and would be presumably bankers, and one would be appointed by the governor of each of the six New England states and would represent the non-banking interests of New England. Again, the four Eastern states are to have two branches. If New York and New Jersey comprised one of these branch districts, and if the directorate consisted of the minimum number allowed; that is, twelve in addition to the governor of the branch (section 8), four would be appointed by the governors of New York and New Jersey. In this case, probably three would be appointed by the governor of New York and one by the governor of New Jersey. Appointments

⁷ Exclusive of the governor of the branch.

should be made for six years, and, in case there were more than one appointee for a state, their terms of office should be arranged to expire at different times; for example, in the illustration above, for New York one at the end of every two years.

The next change in the plan of organization, I would suggest, would be to *give up entirely the idea of apportioning any voting power on the basis of capital stock, and to adopt the simple and democratic rule of one institution one vote.* This would mean that in the election of directors of the local associations each bank regardless of its size would have one vote for each director to be elected; likewise each local association, in the election of directors of the branch associations, and each branch association, in the election of directors of the Central Association. The change is for the purpose of reducing the danger and of lessening the fear of Wall Street exploitation. Incidentally it has the merit of removing some of the intricacies of the present plan, which are in themselves serious obstacles in the way of that plan's adoption.

In making the changes here proposed in the organization of the central board, it would be well to reduce the size of the board, from its present unwieldy number of forty-six to twenty-eight. The central board would then be comprised as follows: fifteen directors, one elected by each branch board, according to the democratic rule of one branch director one vote; six directors, appointed by the President of the United States for a term of six years, the appointments being made so that two would retire every two years; four ex-officio public officers, that is, the secretary of the treasury, the secretary of commerce and labor, the secretary of agriculture, and the comptroller of currency; one deputy governor to be appointed by the President of the United States; and the other deputy governor to be appointed by the board; the governor to be appointed as at present provided by the President of the United States, from a list of not less than three submitted to him by the board.

The reasonableness of a democratic plan of government for the association is perhaps best evidenced by the fact that such a plan has been voluntarily adopted and successfully followed by bankers in the one important organization in which banks work coöperatively. I refer, by way of analogy, to our American clearing houses—the most efficient in the world—with their great and growing powers and widening functions. In reply to an inquiry on this subject, the leading American authority on clearing houses, Mr.

James G. Cannon of New York, informs me that he knows of no clearing house in the country, although there may possibly be a few, whose voting power of members is apportioned with respect to the capital stock, or otherwise than on the basis of one vote to an institution. This is the rule of the New York Clearing House, where the same voting power is given to the Butchers' and Drovers' National Bank with a capital and surplus amounting to \$427,100 as to the National City Bank with a capital and surplus nearly a hundred and thirty times as large. Yet the bankers of New York have such confidence in the Clearing House Committee, which is elected by the Clearing House Association on the one institution one vote principle, that they vest it with "almost absolute power" including "the direction of practically the whole machinery of the Clearing House." The Clearing House Committee, we are told, is usually composed of from three to five members "chosen from the most capable and experienced bankers in the Association."⁸ The public hears little complaint that the interests of the large banks are not amply protected in the country's clearing house, or that inferior grades of men are elected in them to responsible positions.

In our present American banking systems, we have two organizations formed by the banks themselves which may exercise the functions of re-discount and of issue on the basis of what amounts to the joint guarantee of the member banks, privileges which are among the most important granted to the proposed National Reserve Association. I refer to the loan committees of our clearing houses which issue clearing house loan certificates, clearing house checks, etc., in times of emergency;⁹ and to the National Currency Associations authorized by the Aldrich-Vreeland Act of May 30, 1908. But both bodies are created and controlled on the principle of one bank one vote, regardless of the size of the bank. The clearing house loan committee is almost, if not quite, invariably either elected on the one bank one vote plan, or appointed by the president of the Clearing House Association, who is himself elected

⁸J. G. Cannon, "Clearing Houses." *National Monetary Commission's Report*, 1910, p. 32.

⁹These certificates, checks, etc., perform the function of bank notes in clearing house settlements between banks, and have often been placed in general circulation. Their issue may not always be legal but they are readily tolerated by the authorities in time of crisis. See A. Piatt Andrew, "Substitutes for Cash in the Panic of 1907," *Quarterly Journal of Economics*, xxii (1908), pp. 504-510.

on that plan. This is true although the larger banks have greater responsibility in proportion to their greater funds, in what amounts practically to a joint guarantee of all the associated banks, of the loan certificates issued. This democratic principle of one bank one vote is even more pronounced¹⁰ in its application to the organization of the National Currency Associations, of which we now have seventeen, representing two hundred and eighty-four banks and one third of the capital and surplus of all the national banks in the country. These associations, which are open to any qualified national bank, large or small, in the city or territory where the association is organized, are managed by a board "consisting of one representative for each bank," and the officers and executive committee are elected by this board. The association issues to member banks emergency circulation, on the basis of satisfactory collateral deposited with the association, but the law makes all the banks jointly and severally liable for the redemption of such emergency circulation as between the banks composing the association. However, each is liable only "in the proportion that its capital and surplus bears to the aggregate capital and surplus of all such banks." Voting power is thus proportionate to numbers both in case of clearing house loan certificates and of the issue of emergency circulation of the National Currency Associations, while liability in both cases is in proportion to capital.

This democratic rule of voting is also applied in the Bank of England. Each shareholder owning £500 worth of stock has one vote, but no more than one vote, no matter how much additional stock he holds. Furthermore, English bankers cannot even become directors of the Bank of England. Yet they entrust to the bank practically their entire reserves, and have confidence in its exercise of most of the powers proposed to be given to the National Reserve Association.

The voting rule here proposed for the National Reserve Association is the rule of our American democracy, where we have long since discarded property qualifications for most of our voting; and although our legislative bodies, federal, state, and local, are continually legislating on questions of property, few careful students would maintain that property rights in America have not on the whole been adequately protected.

¹⁰ National currency associations do not have the power to exclude qualified banks from the privilege of membership which most clearing house associations possess. Cf. *Report of Comptroller of Currency*, 1910, p. 32.

We know that in the clearing house associations the big banks, with their powerful prestige and their highly capable officials, do exercise a power quite out of proportion to their numbers, just as the wealthy man politically exercises an influence which cannot be measured at all by the one man one vote rule. Can we doubt that under present conditions, or conditions as they are likely to be for many years to come in this country, the large banks in the National Reserve Association under the unit rule would exercise a power likewise out of proportion to their numbers?²¹ Considering the limited functions of the National Reserve Association, and the numerous safeguards laid down, would the unit rule endanger the capital of the large banks, lead to incapable directors, or to dangerous methods? I have too high an opinion of the rank and file of American bankers to have misgivings upon any of these questions. At present it seems certain that without some such democratization the National Monetary Commission's plan cannot receive the support necessary to make it a law. Is not some further sacrifice of their own preferences by the big banks warranted even by their own interests, and infinitely more so as a matter of the public good?

During the two years in which the National Reserve Association plan has been before the public, its advocates have urged repeatedly and with great emphasis that the reform proposed was not only of great importance to the bankers, but of even greater importance to the business man, the farmer, and the laborer. They have denied that it was a scheme for centralization, and insisted that it was rather a plan for democratic coöperation, analogous to that of the clearing house or of our American system of government. A more democratic plan of organization would bring it into closer conformity to these claims. If the non-banking public has a great and paramount interest in the work the National Reserve Association is to do, why not give that non-banking public an effective say in the determination of its policies? If the organization is to be coöperative and democratic like that of our American clearing house, or of the American government, why not adopt the democratic rule of unit voting which prevails in clearing house and in government?

²¹ It should furthermore be noted that the rule of the National Monetary Commission's plan, excluding from membership banks possessing a very small capital, will exclude approximately a third of the state banks of the country, all possessing capitals of less than \$25,000, and that in general the eligible banks which refuse to join will be the smaller banks.

BANKING REFORM—DISCUSSION

J. H. HOLLANDER: I am in agreement with Professor Kemmerer as to the wisdom of the two amendments which he proposes to the Aldrich bill. I dissent from him as to the adequacy of such modifications to materially reduce the present dead weight of public opposition to any thoroughgoing plan of banking reform. Instead of discussing, therefore, the essential features of such reform—centralized reserve, a discount market, and asset currency—as to the wisdom of which we appear to be in accord, it seems best to consider the causes responsible for the prevalent indifference and to suggest a possible remedy.

There are two conceivable methods by which banking reform in the United States may be achieved. The first might be defined as the cataclysmic or panic method, being the possibility of securing legislation in the frightened desperation of an industrial panic or in the period of dull prostration which succeeds. As a mode of procedure, it is open to all of the indirection and waste of Elia's method of preparing roast pig—and to something of its uncertainty. On more than one occasion experience has shown that panic leads to the swift adoption of a remedial device, but unfortunately of a wrong one. The other method is the slower, more prosaic one of popular education and effective propaganda.

Since the close of the Civil War, currency and banking have been intermittently the subjects of public discussion in the United States. This stretch of fifty years falls roughly into three overlapping periods. From 1865 to the resumption of specie payments in 1878, we were concerned with the problems growing out of inconvertible fiat money. From the demonetization of silver in 1873 through the years of silver purchase to the definitive adoption of the gold standard in 1900, the issue turned upon the question of a monetary standard. From the submission of the "Baltimore plan" in 1894 to the present time, attention has centered upon the revision of our banking system with particular regard to note circulation.

In each such period of discussion, three elements of the community have been directly involved: (1) the law makers, acting reluctantly or under the stress of personal bias and moving in the right course only in deference to an irresistible public mandate; (2) the banking fraternity, representing a definitely vested inter-

est and an immediate class concern, except in so far as members thereof have risen to a more general responsibility; (3) the general public, comprising industrial, mercantile, and agricultural classes—in the main inert and inarticulate, aroused with great difficulty into any consciousness of concern, but imperious in demand when so aroused.

The same conditions figure in the present juncture. The banks of the country are likely to move in the direction of banking reform only to the limited extent that their executives have risen above their professional environment. As bankers they are restrained by a trade inertia, by the reasonable profitableness of the existing system, and by a characteristic underestimate of future trouble. The prospect of relief through legislative initiative is no less remote. The divergence of sectional, social, and economic interests, the mischievous identification of committee chairmanship with proprietary authorship of each particular plan, the comfortable avoidance of moot legislative issues—all suggest that banking reform will come to the legislative fore only when public sentiment has crystallized so emphatically that delay means political suicide.

It is from the third direction that relief must proceed. The public mind must be drilled into an intimate and insistent consciousness of direct involvement. This must take the form of bringing home to each element of the country the specific loss and peril to which it is exposed by the present banking system. In this campaign of education the political economists of the country must play a much larger and a more expert rôle than they have hitherto assumed. They must by further inquiry and new analysis make clearer and more accessible very many practical aspects of our banking system of which little is said because less is known,—the inconvenience to the industrial and mercantile community of an exaggerated seasonal drain, the present expensive substitutes for the discount of bills receivable, the crude mechanism by which the rate of foreign exchange is fixed, the increasing repressive effect upon commercial borrowing of security holdings by banks of discount.

LEROY D. PEAVEY: Reviewing the subject of banking reform as indicated by Mr. Kemmerer's paper, he agrees, as do nearly all close students, that the plan is well worthy of adoption. There is little doubt in the minds of many that, among numerous other

advantages, the mobilization of the reserves and the opportunity for banks to re-discount at stated rates would be altogether beneficial to the country. The slow headway which such a plan has made, which slowness Mr. Kemmerer has enlarged upon, is to be lamented. Possibly the thing needed to secure its adoption is another 1907 panic. Certainly the fair business conditions of the last year or so have caused the people to forget that an efficient monetary system is as much needed to *prevent* panics as it is to *remedy* them.

It has come to me almost first-hand that Mr. Aldrich wishes suggestions and criticisms, and welcomes any attitude which will insure the passage of some law which will better our present monetary system. As Mr. Aldrich states, this plan, comprising the best features of all banking systems, has been evolved after a prolonged and laborious study by competent men, and it is quite generally agreed that the slowness of its adoption is due to the fear that some one class of people will get control of it to the detriment of the country.

Mr. Kemmerer states that there is apprehension lest bankers or certain interests called the "money trust" shall get control. Is it not also true that the merchants and farmers of the great West wish to have control of this system? Again, there is another point which Mr. Kemmerer has not mentioned,—namely, that some believe the government should be in control. On good authority I think I may say that President-elect Wilson believes the banking system should be controlled from Washington.

As to Mr. Kemmerer's suggestion concerning the directorate, this is a hard matter to decide. There is some truth in the objection that a board of nearly fifty members is an unwieldy thing, and, on the whole, I am inclined to agree with him that a smaller board, and one elected in a more democratic way, as he suggests, will cause the bill to be looked upon with more favor.

In spite of the safeguards which this plan provides, however, does there not still remain a wide range within which the directors of the Association may expand and contract credit at their own discretion? All are generally agreed that the responsibility intrusted to these directors would be very great. Even if the Association should never be exploited for private ends, there are very responsible questions to be settled. The question is not only one of *good intentions*, but of *good judgment*. None who are familiar with the complexity of the problem can believe for a moment that

it is not a difficult thing to regulate credit in the manner suggested. For one reason, the human equation cannot be eradicated; directors representing business interests might instinctively desire expansion as a stimulant for trade; bankers also might be similarly influenced, while ex-officio government directors might be inclined in the same direction, feeling that expansion is a feather in the cap of the administration. Moreover, the public might persistently urge the drivers of the great machine to "let it out another notch!"

Finally, even though we disregard such dangers as the above, we cannot escape another momentous consideration, namely, that the National Reserve Association is not designed as a mere emergency measure, a sort of buffer at the extreme peak of a boom and the very bottom of a depression, but a permanent institution, the duty of which is to keep credit steadily on a normal line parallel to the average growth of the country. I think a part of the opposition to the Aldrich plan has been due to the failure of the public to appreciate the great fact that the object of maintaining a National Reserve Association is not to ameliorate panic conditions, but rather to prevent such crises altogether by keeping credit continually normal. In other words, the true mission of the Association is not *palliative*, but a *preventative*; it is not a *safety valve* but a *governor*. Those men therefore are greatly in error who suggest that we do not need the banking and currency reform because we already have the Emergency Act. They have missed the real purpose of the plan.

The interest rate is, in the last analysis, the bone of contention, being the throttle of business. Various classes of people wish to be the governor which controls this throttle, but the interest rate of the nation should be based on business conditions as a whole. In the paper on *Statistics and Politics* read before the Statistical Association the other day, I explained in some detail how a composite plot or graphic of business conditions, such as the copies for distribution at the door, will give at all times an approximately exact idea of just how business is at any given time. I have not time here to explain how this particular graphic is made, but would refer to the published record of the paper in the regular journals of the American Statistical Association.

Suffice it to say that this is a composite plot of such subjects as Immigration, New Building, Failures, Bank Clearings, Commodity Prices, Surplus Reserves, Foreign Money Rates, Domestic Money

Rates, Condition of Leading Crops, Idle Cars, Political Factors, and Stock Market Conditions. Now, instead of any one class of people controlling interest rates, should not these rates be determined from a study of such a composite plot, increasing according to a definite scale as the country develops an area of prosperity, and decreasing according to the same scale as business declines to form an area of depression below the line of average growth of the country? To my mind this would remove much of the prejudice against the Aldrich plan, as such a scale could be determined definitely and made satisfactory to all classes of people. Moreover, the amount of notes outstanding could be adjusted to a similar scale, rising automatically as an area of prosperity begins to form, and falling automatically whenever an area of depression develops below the average line of growth for the country.

Surely this will eliminate many perplexing problems, allay prejudice, and give a working basis for a bill modeled along the lines of the scheme which Mr. Aldrich has proposed, which bill I am very much in favor of. It seems to me that the sliding scale of money rates and notes outstanding as above suggested will practically settle the question of control, and remove many of the objections to the plan.

O. M. W. SPRAGUE: Professor Kemmerer is to be congratulated on the plan of organization which he has devised for the control of the machinery needed to make possible coöperative action among the banks. He has attacked the chief obstacle which has been encountered in the effort to secure banking reform legislation—the widespread fear that greater power over money and credit might be secured by a few banks and bankers in the money centers, and particularly by those of New York City. Professor Kemmerer's plan has the enormous advantage of being far more simple than that adopted by the National Monetary Commission. Under the plan of the Commission it is most unlikely that control would ever be acquired by particular groups or classes of banks; under Professor Kemmerer's plan this possibility would be even more remote. But this is not its chief virtue. It is conspicuously a better plan because it makes more obvious, more intelligible, the impossibility of undesirable control over the proposed Reserve Association.

But while a method of selecting the directorate which shall give

the people confidence in the Reserve Association is essential if legislation is to be secured, it is also essential that the board of directors shall be made up of men of unusual foresight, conservatism of temper, and strength of purpose. But the plan of organization of the Monetary Commission and that of Professor Kemmerer are unsatisfactory in this respect and necessarily so. This is an inevitable consequence of the necessity of making sure that the board of directors shall fairly represent the different interests, and the different sections of the country. An honest and fair-minded board we may secure through ingenious legislative devices regarding its selection. But to secure the choice of men with the necessary experience and firmness of purpose to handle the difficult questions which will come before them is not possible by means of statutes alone. Experience with the workings of the Reserve Association will in time provide rules of action suitable for most contingencies, but at the outset the problems confronting the management will be both novel and exceedingly complex. For these reasons it would seem desirable that the power of the Reserve Association to extend credit should be no greater than is clearly necessary for the main purposes for which the institution is to be established. Moreover, the vague distrust on account of which detailed provisions for choosing the directorate are devised will be lessened if the institution itself is to be one with distinctly limited power over credit. I feel, therefore, that my part in this discussion will be in line with the spirit, even if not with the content, of the opening paper if I venture to indicate reasons for thinking that the powers of the Reserve Association may be limited more definitely than they were in the measure formulated by the Monetary Commission or in most public discussions of this subject.

It is commonly assumed that a cash reserve of 50 per cent of demand liabilities, including both notes and deposits, would ordinarily be maintained by any institution set up in the United States in which was lodged the responsibility for the maintenance of the cash foundation of the credit structure. The resources of such an institution would be derived in part from government balances which it may be assumed would generally amount to at least \$100,000,000 and from the balances of the other banks, deposits which may be expected to amount to \$500,000,000. With these resources and without any power to issue notes whatever, several hundred millions of loans could be granted before the reserve would be brought down to 50 per cent of liabilities. If the exist-

ing note-issue of the banks were taken over, a part of the cash held would be absorbed as a reserve against them, but any further right of issue would greatly increase the power of the Reserve Association to extend credit before the reserve was brought down to the 50 per cent point. This is because of the large volume of one of the kinds of paper money now in circulation—the gold certificates. In the ordinary course of business gold certificates would be received by the Reserve Association, and if instead of paying them out they were retired and the notes of the Reserve Association were used in their stead we may expect that in the course of a few years its notes would have pretty completely taken the place of the gold certificates in the hands of the people. To this substitution there could be no objection if the additional reserve money thus secured were not made the basis for additional loans. But with the view generally held that a reserve of 50 per cent is quite large enough, the management of the Reserve Association would be subjected to enormous pressure to extend loans in periods of active business. Can we be sure that we shall have a management wise enough and strong enough to withstand such pressure?

Aside from the increase in lending power due to the ordinary growth of the banks generally, it is distinctly undesirable that there should be any considerable increase in the supply of funds available for short-time loans in this country. At present and aside from seasonal requirements, the supply of short-time loans is quite as great as can be safely employed in present business dealings. Possibly an excessive amount is now employed in collateral loans and perhaps a slightly greater amount of commercial loans could be utilized without extreme hazard. Some such change as this in the relative proportion of the two classes of loans is likely to follow the establishment of the Reserve Association if its re-discounts are restricted to commercial paper. But to increase greatly the total of bank loans will be certain to result in disaster through the increased reliance upon short-time loans for objects the funds for which should be secured from permanent investors.

I would suggest that the power of the Reserve Association to issue notes be limited to an amount not exceeding 25 per cent of its cash holdings. This would permit all the increase in our paper currency which can, from any point of view, be regarded as desirable. It would also be likely to impress upon the management of the Reserve Association, and upon the people generally, the importance of carefully husbanding its resources so as to be in position

to meet seasonal and emergency requirements. This restriction would also be likely to keep the total volume of loans made by the Reserve Association within moderate limits in ordinary times. The institution would then be a less powerful factor in the business world, less liable to be subject to popular distrust.

There need be no fear that a limited right of issue would so weaken the Reserve Association as to defeat the purposes for which banking reform is desired. The facilities which an institution such as the proposed Reserve Association can provide for making settlements between the banks and for the transfer of funds between different parts of the country will tend to make far more uniform requirements for the use of the cash reserve of the several banks. With greater stability in reserves the lending power of the banks will also be more stable, thus lessening the need of resorting to the Reserve Association for re-discounts. Past experience in crises in which banks have suspended payments should not be taken as a measure of cash requirements after the Reserve Association has been established. A fundamental purpose of all plans of banking reform is to escape suspension in future. This will be largely accomplished by such an institution as the Reserve Association, not by paying out an indefinitely large quantity of its own notes, but through the power which it will have by the granting or withholding of re-discounts to insist that the other banks make full use of their own reserve instead of hoarding large amounts in excess of reserve requirements, as has been the practice of many banks in former crises.

An institution which shall make a comparatively small amount of loans in ordinary times and which shall need to make no very considerable additional loans even in emergencies can accomplish practically all of the results desired by those interested in the improvement of our banking system. It can do this through arrangements for making payments between banks in different sections of the country, thus providing the same service which is performed by clearing houses for banks in particular places. Its functions would be largely of a routine nature, so that its establishment would be unlikely to occasion distrust or alarm in any section of the country.

E. E. GARRISON: There is no other subject so vital in business economics, government, or industrial relations as proper banking functions.

When Professor Kemmerer says, "It is not disapproval of the functions assigned to the proposed National Reserve Association that has rendered the so-called Aldrich plan unpopular," he is, in my opinion, entirely mistaken.

It is the unsound, unfair, and uneconomic functions which were proposed to be invested in the National Reserve Association that have defeated that plan so far, and will continue to defeat it.

If the proper functions were provided and all improper functions proscribed, the country at large would accept almost any form of organization, because the average man can easily be made to see that no organization or influence could divert these functions from their beneficent, normal operation. In other words, we must create an institution whose possible activities are so carefully prescribed and so accurately circumscribed that what should be done will be done, and nothing else can be done, or can happen. We must get away from the theory that any group of men, no matter how assembled, will be wise enough, honest enough, or powerful enough to create and maintain the proper functions, and only the proper functions, when sitting as a board of directors of an institution of re-discount, reserve, and issue.

The vital thing in the whole question of banking is the relation of relative volume of medium exchange to prices of commodities, and when I speak of "medium of exchange" I mean deposit currency, as well as other forms.

To grasp this greatest consideration in the whole matter, it becomes necessary to learn the lesson of history, and particularly of the history of our own country during its periods of unsound banking, including the period from 1866 to the present time. This lesson is very simple and very obvious to the careful student, and can be briefly summed up as follows: any form of banking which gets too far away from the issue of medium of exchange (including most of the deposit currency) upon, and only upon, evidences of actual contemporaneous exchange of currently produced commodities, will result either in inflation or contraction; and in one case will enhance prices faster than money wages, and in the other case will contract prices, discourage legitimate activity, and throw labor out of employment.

It will here be necessary only to refer to conditions at the time of *Shay's rebellion*; to the influence of both confederate and government issues during the Civil War, and to the fact that during the past fifteen years, when prices have been rising beyond all

precedent, the volume of gold has increased from eight hundred million to a figure 70 per cent greater than that, while deposits have increased from seven and a half billion to a figure 100 per cent greater than that, which would be equivalent to 940 per cent increase in the volume of gold in circulation. It can be accepted as axiomatic that anything which the people will accept generally in exchange for labor and commodities at a fixed ratio to some other commodity, gold, will have the same effect upon prices as increase in the volume of gold itself in circulation, and will continue to have that effect until an offsetting premium on gold appears. This would not be true if, as the old-fashioned economists believed, a dollar of inflation always drove a dollar of good money out of the country; the slack is not taken up that way. The slack is taken up by an increase in the prices of commodities, and particularly so under the tremendous centralized and efficiently financed organizations commonly spoken of as "trusts," which, to a greater or less degree, monopolize the power of price making, even when they do not monopolize the output of the commodity in question.

The only method that has ever been discovered, or probably ever will be discovered, since the medium of exchange was originally invented for the confusion of man's mind, which even approaches, albeit imperfectly, an approximation of the current volume of all forms of medium of exchange to the actual needs of legitimate business, and thereby to a noninflating and noncontracting volume, is the method which, in so far as possible, confines all issues of denominational paper currency to re-discount for the banks by a government controlled central institution of strictly defined short-time commercial acceptances arising from the actual exchange of commodities representing the best credits in the world, that is, commercial credits, and floated through banks and a banking system controlled in a preventive rather than a curative way by a premium upon commercial banking over investment and speculative banking. This premium need be nothing more than a preference on the part of the central institution in making its rediscounts in favor of those banks which, when stress upon the money market arises, can be shown to have invested the larger proportions of their assets in real commercial banking.

This does not involve any hardship to legitimate investment banking; it does place a decided handicap upon purely speculative banking. Furthermore, such an institution should be subject to

the constant study of a commission of competent economists, whose only purpose should be, with these facts in mind, to watch the effect of banking in all its branches upon commodity prices, and to communicate with the central institutions of reserve and issue in all other countries upon this subject.

There is no legitimate function of a central institution which cannot be amply provided for without breaking away from the fundamental principles referred to.

The objection to this strict definition of the functions of a central institution has been made that it will take a considerable time for the business men of the country to create an adequate volume of commercial acceptances. There is no foundation for this objection, since the volume of good book accounts in the country is at any time several hundred times as large as is necessary to meet any condition that might arise; and upon the first appearance of money stringency every business man in the country would willingly draw and accept short-time bills if they could be properly liquidized. In fact, one of the most essential things to provide for in such an institution is some contraction at the outset of our present enormous volume of medium of exchange, as a safety valve against too sudden an influx of commercial paper into the banking machinery.

To see where the so-called Aldrich plan not only fails to provide the necessary functions, but actually provides for very dangerous possibilities of further overexpansion of our medium of exchange, it is only necessary to read clauses 26, 27, 28, 31, and 32. Clauses 26 and 27 provide inadequate and unduly cumbersome re-discount of commercial paper; clause 28 provides that in the face of a stringency the banks may discount their direct obligations secured by "satisfactory securities;" clause 31 provides that the banks may accept drafts "properly secured," and then, in very vague terms, adds, "arising out of commercial transactions;" and clause 32 "that the Reserve Association may buy from the banks acceptances of banks or of acceptors of unquestioned financial responsibility," and vaguely again adds, "arising out of commercial transactions." This vague expression "arising out of commercial transactions" is by no means an adequate definition of strictly defined short-time commercial acceptances covering the actual exchange of commodities, and any practical man of affairs knows that the money-making motive is strong enough in the American people to lead both business men and bankers to

stretch such a clause in normal times and to forget it entirely in times that are not normal.

Briefly stated, what we need is to provide the function of issue based upon the re-discount of strictly defined commercial paper, partly because that function will produce equilibrium in the financial world, and partly because it will go farther than any other one influence toward preventing unnatural price variations. Its influence upon prices is partly positive and partly negative, in that it facilitates the exchange of commodities when such facilitation is most needed, and it prevents investment and speculative activities from interfering with such exchanges by monopolizing the money market; in other words, it is the only system which will bring us to what Jevons a long time ago called "a perfected state of barter."

Given a proper delimitation of functions, the only consideration, from the standpoint of organization, is that it should be politically sound,—that is, so constituted as to merit and win the confidence of the people. It makes little difference, given proper functions, whether the institution be a privately owned central bank under adequate government supervision, or whether it be a government commission or a national council. Such functions as have been here described could not be much distorted either through ignorance or interest, and any distortion of them would be so patent that it would be easily checked and its originator readily brought to punishment.

The Aldrich plan, mainly through the unsound functions that it provides, at once aroused the suspicions of thousands of business men who, like myself, have had the experience of being able to borrow in Wall Street on a ten-point margin, to carry speculative stocks time and time again, when they were unable to borrow a cent upon a much better and safer form of credit, namely, obligation of the buyer to the seller represented by good book accounts easily convertible into commercial acceptances.

There were other vital defects in the Aldrich plan, principally in the appearance of exclusiveness in its relations with the banks of the country, but also in its creation of an enormous corporation with countless subsidiary corporations all over the country which should hold all the financial activities of government in one hand, and the operation of all subscribing banks in the other, for a term of fifty years, with a very limited government influence provided by Section 58, which reserves the right to Congress to alter or

amend, but not to revoke, and that only at the end of each decennial period, and which grants the President power to select the governor from a list of three nominated by the capital-elected board.

For purposes of comparison and in order to make clear the possibility of building a plan on sound lines which shall provide everything necessary, Professor Scott, of the University of Wisconsin, and I have prepared a revision of the Monetary Commission's plan, copies of which are here for distribution.

In conclusion, I desire to say that, in my opinion, it is not the prejudice of the American people against a central issue discount and reserve institution which has defeated the Aldrich plan. On the contrary, it is the defects in the Aldrich plan—I had almost said the vicious provisions contained in it—which have intensified what prejudice formerly existed and aroused new ones. If currency reform has suffered a setback in the last two years it is because the only plan that has received wide circulation and been generally discussed has made a bad impression upon many thinking men.

I do not believe that currency reform has suffered a real setback. The Aldrich plan has done a good work in showing the people what kind of an institution we should not have, and the business world is more alert today for a right plan than it has ever been since Andrew Jackson crushed the second central bank by offering to the state politicians the bribe of the distribution of the national surplus, and to the state banks an equally tempting bribe in the form of the deposits of the national reserves. A really sound plan will be received by the business men of the country with enthusiasm and with more intelligence than would have been the case immediately after the panic of 1907.

E. W. GOODHUE: It is rather surprising that the people of this great country have been so long content with the present banking system. The National Banking Law has remained, for a period of almost fifty years, substantially unchanged.¹ In the meantime population has increased, new industries have been developed, large corporations organized, foreign trade has steadily grown and become increasingly important, methods of doing business have changed, the South and West are making larger and larger

¹ Cf. J. L. Laughlin, *Banking Reform*, p. 1. (National Citizens' League, 1912.)

demands upon the banks for credit and currency, and the products of the nation have increased rapidly both in quantity and value. Because of these industrial changes a greater burden and responsibility has been placed upon the banks.

For the past ten years there has been in certain circles a thorough discussion of the defects in our banking system. Various propositions have been made for remedying these defects, which range all the way from slight modifications of our present law to a central bank of the European kind. The National Reserve Association plan with branch and local associations is now definitely before the country. The aim of this plan is to bring about coöperation between the nearly twenty-five thousand banks in this country, to centralize the resources of these banks, and to add new machinery which will promote banking efficiency in normal times. This plan is the result of the most thorough study into banking conditions which has ever been made in this country. Presumably it is scientific, nonpartisan, and so far, at least, as its functions are concerned well adapted to meet modern conditions.

Our experience in the panic of 1907 proved conclusively that a system of independent banking breaks down in times of crisis. Because of this recent experience interest has chiefly centered in the problem of strengthening the banks so that they may be better able to stand the strain of a crisis. In general very little attention has been paid to the weakness of our system in normal times. If the National Reserve Association, or any other scheme of centralization which might be adopted, should remedy the banking defects of this country in times of crises, in my judgment, it would do so in part because the banks would be able to meet more fully the growing demands made upon them in normal times.

Recently, Mr. Harry A. Wheeler, President of the Chamber of Commerce of the United States of America, commenting on our banking system said:—"We have a fair weather banking system. It works all right in good times, but it breaks down just at the time when it is most needed—in a period of financial distress."¹² This statement fairly represents the idea which quite generally prevails in the country. In the minds of the people at large the defects in times of crises have overshadowed and almost obscured the defects in normal times. But to those who have studied our system carefully there are grave doubts in regard to the fair weather character of the system. When the country is most

¹²See *New York Times*, December 1, 1912, p. 6.

prosperous our banks are not able to meet the complex demands made upon them. We are familiar with the money and credit stringency during the crop moving period which has given rise to the demand for an elastic currency. We are, perhaps, somewhat less familiar with the disadvantages of our Independent Treasury System; the discriminations against one of our most reliable assets, namely the paper which is backed by agricultural products; the relative immobility of funds in the United States; the heavy commissions paid foreign acceptance houses; and the non-negotiable character of our prime commercial paper.

During the present year from September 14 to December 14, with the exception of the week from October 12 to 19, there has been a loss each week to the sub-treasury by the New York Clearing House Association banks of sums varying from \$1,945,000 to \$10,423,000. The total loss for this period of thirteen weeks was \$68,842,000.³ This loss was coming just at the time when the South and West demanded funds, and compelled the New York banks to shift loans, engage gold abroad at high rates and look for deposits from the government. Agricultural loans, in which some of the most reliable assets of this country are offered as security, are made at high rates. The average ranges from 7 to 9 per cent as against 3 to 4 per cent for the same class of loans in Europe. The foreign trade of the United States has grown enormously, and legitimately ought to become of more and more importance year by year. At the present time our foreign trade aggregates about \$4,000,000,000 annually,⁴ and in order to finance this trade we are compelled to pay millions of dollars to London, Paris, and Berlin banking houses for the acceptance of our bills drawn against commercial letters of credit.⁵ These illustrations constitute a part of the evidence that our system is not adapted to the changed commercial and industrial conditions in this country; that it is not even a fair weather system.

The financial legislation of the last fifty years has done little to remedy defects in normal times. Some real or fancied emergency has forced the political party in power, almost on the spur of the moment, to frame and pass a currency measure. A war, a

³*New York Times*, September 14 to December 15, 1912.

⁴*New York Times*, December 1, 1912. Article by Harry A. Wheeler, "Our Banking System Fails Under Strain of Bad Times," p. 6.

⁵Cf. Paul M. Warburg, "The Discount System of Europe", p. 9. (*Report of National Monetary Commission*.)

crisis, an impending party defeat at the polls has been the chief factor in the passage of our currency and banking laws. Legislation has been hammered out in Washington to save the party's face, or as a price paid for the passage of some favorite measure. Moreover in the struggle to meet the real or fancied requirements of an emergency, economic or political, the bill actually passed has been riddled with compromise, and has shown all too well the effects of party bickering and bartering. We have only to point to the National Bank Act of 1863, the Sherman Act of 1890, the recent Aldrich-Vreeland Act to illustrate the effects of emergency in the legislation relating to banking and currency reform. The National Bank Act was a war measure, the Sherman Silver Purchase Act was the price paid for the McKinley Tariff measure,⁶ the Aldrich-Vreeland law was a sop thrown at the asset currency advocates.⁷ Under the political conditions which have prevailed in the past, a scientific banking law would be a practical impossibility. Once the National Monetary Commission's bill gets into Congress it will, I fear, go the way of many another good public measure. Either it will be lost in committee or else will be subject to such party compromises that most of its great public functions will be altogether destroyed. In the presence of no great demand for changes to meet day to day needs, party exigency, vote swapping, and political intrigue will work havoc with the bill.

The people of the country know little about a scientific banking plan. The name "Aldrich" constitutes, in the country at large, a much stronger argument than the intrinsic advantages to the business community of the National Reserve Association plan. The average farmer or merchant is not able to form a judgment of the new scheme for banking reform on its own merits. The vocabulary of banking is likely to be incomprehensible to him. Acceptance, discount, mobilization of reserves, asset currency are almost meaningless terms. In many cases the farmer and merchant do not see in just what way the plan is going to benefit them. They look upon it as a scheme originated by bankers to benefit bankers. The mere fact that the National Reserve Association is to be a bankers' bank is a telling argument against it.

⁶Cf. Noyes, *Thirty Years of American Finance*, p. 151.

⁷Cf. J. L. Laughlin, "The Aldrich-Vreeland Act," *Journal of Political Economy*, Vol. 16 (1908), pp. 489-513.

The average man fails to take account of the many features which will reduce the expense and delay in doing business.

Not only are the farmers and merchants at sea in regard to this new plan of banking reform, but the average lawyer, physician, clergyman, teacher in the schools, and even professor in the colleges, with the exception of the economists and some few others, know little in regard to the real merits of the bill proposed by the National Monetary Commission. The functioning of the scheme, its adaptability to the changed commercial and industrial conditions, has not attracted the attention of the intelligent classes in the United States. Bankers and experts in the field of economics see deeper than the name "Aldrich" or "banker's bank;" but I fear that a meritorious plan of banking reform is likely to be thrown aside because the average citizen sees nothing in it but a scheme to still further intrench the so-called "money trust." The public is quiescent and unconcerned; the panic of 1907 is a thing of the past; our people put up with the inconvenience and expense of a poor banking system without complaint; they are used to it, the force of custom is strong upon them, and they do not clearly see the defects which make our system so out of harmony with modern business conditions. Real public sentiment—the kind which would force Congress to enact a scientific banking law—is largely lacking.

The National Citizens League and the American Banker's Association have made commendable efforts to educate the people along banking reform lines. Large sums of money have been spent in propaganda, and yet the work of education has but just begun. So far as the present plan is concerned there are four facts which stand out clearly:

1. The public (average citizen) needs to understand something about the great fundamentals of banking.
2. The public must see how the National Reserve Association will strengthen the banks in times of crises, and through the banks the commercial and industrial interests of the nation.
3. The public must be able to see the importance of this new plan in meeting the day to day needs of the business community.
4. The public must look past the name "Aldrich" and "bankers' bank," and support or refuse to support the plan upon its real merits in solving the difficult problems of modern banking reform.

ROYAL MEEKER: I think it is all-important that we do not

exaggerate the importance of our differences and minimize the importance of our agreements on the question of banking reform. If each insists upon standing aloof and refuses to surrender any part of his own pet plan, we never shall agree upon any plan of reform, and, consequently, perhaps no banking reform will be carried through, or if reformation is effected the economists will have contributed nothing thereto. I for one do not wish to see Congress enact a banking measure to which economists shall have contributed only confusion of counsel and mutual condemnation. I believe it is possible to harmonize the apparently conflicting views expressed here this morning. I believe Mr. Garrison exaggerates the distance between his plan and the plans suggested by the other speakers. I agree with him that there are two kinds of banking extant in the world today. I should not designate these two classes just as Mr. Garrison does. I do not think we can describe banking systems as Scotch, Irish, Dutch, English, or French. The Scotch banks, as a matter of fact, do not take care of commercial and industrial credits in any different manner or any more effectively than do the banks of Ireland, England, Canada, Germany, or France. In fact the Scotch banks are a part of the great English banking system. The two different kinds of banking in existence may be best described as (1) coördinated, systematized, centralized banking, and (2) disorganized, chaotic, decentralized banking. We have the latter kind; every economically civilized country has the other kind. We all desire to systematize and civilize our banking system. Mr. Garrison differs from others who have spoken only in degree. He wishes, I take it, to connect our banking system more closely with the industry and commerce of the country. He seems to assume that the miscalled "Aldrich bill" was not designed to accomplish these desirable results. It must not be forgotten that Mr. Aldrich is not the author of the "Aldrich bill." He had about as much to do with framing that measure as I had. The bill is the work of many experts, laboring faithfully through many months. None of these experts have any axes to grind. Nearly all who have studied the Monetary Commission's bill critically agree that it will accomplish just those results emphasized by Mr. Garrison pretty satisfactorily. Why cast the work of the Monetary Commission to the four winds just because the gentleman from Wisconsin doesn't like the name Aldrich? I believe it possible to draw up a measure that will meet Mr. Garrison's criticisms so far as they are valid, and secure the

support of all serious students of banking and currency. It is important that every economist who has made a special study of banking should state his views frankly and defend them valiantly in debate. It is even more important that all approach the subject of banking reform in a spirit of conciliation, prepared to give up many pet theories in order to secure the main features of reform which we all favor. Surely banking reform is more important than any particular individual's scheme for banking reform. By means of conferences and conciliations, giving a little here and taking a little there, the economists of the country should agree upon a plan of banking reform which would meet with the approval of all and present a practicable plan for legislative action.

JOHN R. COMMONS: I am surprised at the complacency with which those who have presented their papers have accepted the economic part of the Aldrich bill. They have simply taken for granted that there are no "jokers" in the bill and that its use of terms is such that it would really become an aid to the commercial activities of the country as against the speculative interests. Instead of a discussion on these features of the bill, they have presented merely different schemes to make the bill more appetizing to the people, by making it more democratic in its organization. I should think that, as economists, we should more carefully examine the economic features rather than the political features of the bill. It is there that we should search for anything that, under the guise of elastic currency for commercial purposes, would let in speculative securities. This is the point that Professor Scott and Mr. Garrison have undertaken to correct in the bill which they have drawn as a substitute for the Aldrich bill.

ARTHUR S. DEWING: I had no intention of commenting on this topic and am impelled to do so now merely because I find the whole temper of the discussion in direct opposition to my own attitude toward the problem. At the present time there is a popular clamor to increase the control of governmental agencies over business. A single Central Reserve Association, the administrative details of which would lie largely in the hands of political appointees, is merely, in my opinion, one aspect of this tendency. We seem to forget the tremendous self-adjusting power of business. We like to delude ourselves into thinking we can shift the responsibilities which are ours on to the shoulders of a socialized organ-

ization of some kind. But in the five minutes at my disposal I have no intention of delivering a polemic against the plan of a Central Association. I should like, however, to call attention to three distinct points.

First,—a kind of looseness of reasoning in which the advocates of the Central Association are apt to indulge. They point out that in England, France, and Germany there are central banks of some kind, in this country there are none. The panics of 1873, of 1893, of 1907 were particularly severe in this country,—*ergo*, our banking system is at fault. Strange, is it not, that in the two centuries or more in which the Bank of England has been in existence England has suffered many times from financial crises of a most pronounced character. In fact we have only recently come to realize the world-wide seriousness of the panic of 1907. The reference of the last speaker to the alleged fact that interest rates in parts of this country were 7 or 8 per cent, while in parts of Europe they were 2 or 3 per cent, as pertinent to differences in banking systems, is an example of a kind of fallacious appeal to the logical method of agreement and difference which is unfortunate to say the least.

The other two points to which I should like to call to your attention concern two tendencies by which modern business is itself meeting the difficulties of our individualized banking system and our inelastic currency. The first of these is the growing importance of the note-broker. Few people, I think, realize the tremendous volume of commercial paper now negotiated through the intermediary of a broker, for the modern merchant in commercial paper, in his present importance, is of comparatively recent origin. Back of 1892 his activities were more or less localized. At least they did not tend to create a discount market of national scope. But beginning with the returning prosperity of the late nineties, and particularly since the panic of 1907, the business of the note-brokers has assumed national significance. I was recently given statistics which I am not at liberty to make public which indicate that about 1895 there was very little eastern paper discounted in the western market, while at the present time the volume of eastern paper discounted in the South and West is somewhat larger even than the volume of western paper discounted in the East, although this totals, at the present time, to a very large amount. In other words the note-broker, by the distribution of large accounts throughout the country, is creating a discount market

which enables small banks and individual investors in commercial paper to distribute their holdings geographically and among a variety of industries. The growth of the business of the note-broker creates, therefore, a national re-discount market, fortified by competition and private initiative. If this business can be made extensive enough, as is rapidly taking place, it supplies one of the specific advantages offered by a Central Association having re-discount privileges.

The third point which I wished to touch upon, in the minute remaining to me, is the widespread tendency of manufacturing and trading partnerships and corporations to fund a large part of their current liabilities into a mere stock liability which becomes widely distributed among the members of an investing public. Pertinent to this tendency is the numerous issues of 7 per cent preferred stock now being listed on the New York Stock Exchange. Approximately 68 per cent of the new listings are of this class. A manufacturing company, for example, finding the amount of its outstanding notes and bills growing unwieldy, reincorporates in such manner that a large issue of preferred stock is emitted. This is taken by a syndicate of investment bankers and resold in odd lots to an investing public. With the proceeds of the preferred stock issue, the manufacturing company then takes up a considerable part of its discounted bills. As far as financial condition is concerned, therefore, the company has been strengthened, for a floating liability has been transferred into a permanent capital liability. The corporation becomes less dependent on the money market and less at the mercy of financial crises,—in other words, less affected by fluctuations in the demand for bank accommodation and indirectly less dependent on the elasticity in the volume of currency.

These are but two ways in which business enterprise is adjusting itself to our individualistic banking system, but they are noteworthy and important.

O. W. KNAUTH: Discussion of the project of a Central Bank naturally divides itself into two parts: its functions, and its control. Professor Kemmerer's study is confined to the latter of these aspects, and it is to this that I would like for a moment to bring back the discussion.

Professor Kemmerer's main contention is that the bank is primarily a social institution; that it concerns not only the bankers,

but all the industries of the country. This analysis of the situation seems to me to be unquestionably correct. But accepting it as a premise, we are brought to the question of the adequacy of the remedy to meet this condition. The Aldrich plan gives to the government but a small minority of representation on the board of directors. Professor Kemmerer proposes to increase the number to eleven out of twenty-eight directors. While a step in the right direction, this is still, however, a minority. A minority is at best a party of protest: sufficient ordinarily, but totally unavailing in times of real stress. The logic of the situation seems clearly to demand that fourteen at least out of the twenty-eight directors be representatives of the government.

In turning to the political situation, we find at least a balance of power as desirable as in theory. Professor Kemmerer has shown that the failure of passage of the Aldrich bill is due to the popular fear that the so-called Wall Street banks will strengthen their control of the monetary situation. How much easier, then, would it be to pass a bill which definitely prevented such control than one which still left a loophole for its realization? Should the banks object to this proposition, they would place themselves in the awkward position of being open to the charge that they contemplated acquiring the control of the bank, and would thus give definite foundation to the present vague fears of the public. In any event, the question of control would be brought into much clearer light than it is today.

To sum up, then, Professor Kemmerer, by applying a remedy which only modifies the present plan, instead of adequately altering it, is open to the charge of shrinking from the conclusion which his own arguments seem to necessitate.

JOHN M. CLARK: Just one point with regard to the proposal of Professor Kemmerer for the democratizing of the Aldrich plan to remove popular opinion. One source of opposition which I have met is the indirectness of control of the members over the Central Association. The public nature of the institution has been emphasized, and the analogy of our government has been used. But to find a parallel to the organization of this body, we should have to imagine a system where ward councils selected delegates to boards of aldermen, these boards elected the members of the legislature, and the legislature made up in this way chose our Senate. Considering the popular attitude toward the way our

Senate is elected now, we can imagine what their feelings would be toward any such system of representative and re-representative bodies if anyone were to propose it in the field of government.

I don't presume to say just how this objection should be met, but I do know that it is a source of part of the more intelligent popular opposition which Professor Kemmerer wishes to remove by making all reasonable concessions to it.

EUGENE E. AGGER: I should like to say a word or two concerning "jokers," about which we have heard a great deal in connection with the Aldrich plan. "Jokers" are usually spoken of as resulting from deep-laid plans, all aimed skillfully and secretly to promote the interest of those who devise them. Professor Commons has warned us that we ought to subject the Aldrich scheme to the minutest scrutiny with the idea of uncovering every possible "joker." While not denying the possibility of purely accidental "jokers," and thus while not in the least desiring to weaken the force of Professor Commons's warning, I do consider it necessary to call attention to the fact that a purposeful and skillful planting of a "joker" in such a measure as the Aldrich scheme requires a full and complete understanding of the scheme as a whole and of all its implications; and it is perfectly safe to say that there is not one banker in a hundred who understands banking as an organized system well enough to devise a "joker" that would not be instantly detected. The charge, oft repeated in the public press, that the whole Aldrich plan is a cunningly devised scheme in the interests of Wall Street and the "money trust," is humorously idle. There is an amazing ignorance on the part of bankers as a class of banking as an economic function. They can, of course, distinguish between a promissory note and a mortgage, which capacity is held to be the first requisite of a banker, but there are precious few who can set forth intelligently the requirements of an economical and scientific banking system. I spoke recently about this very matter to one of the most prominent bankers in New York City, one who also enjoys a considerable reputation as a scholar and as a publicist, and he told me smilingly, in answer to a question about the Aldrich plan, that there were very few bankers who really understood that plan, although the farther away from New York you got the more you might possibly find. Then every now and then in the *Wall Street Journal*, and in other financial papers, there are published articles for the

enlightenment of "the Street" that seem to the student to deal with surprisingly elementary points. For example, not long ago there appeared in the *Journal* an article with large headlines that took up the major portion of a column, the whole purpose of which was to set right what was called the erroneous impression of "the Street" that the recently imported gold meant an extension of credit equal to four times the amount of gold imported. The writer of the article gravely explained that against the deposit of the gold itself a reserve of 25 per cent had to be maintained and that therefore the extension of credit could at most equal only four times three-fourths of the amount imported, or just three times the whole amount. Now I submit that those who had to have such an elementary fact expounded to them could hardly devise a very complicated and subtle "joker" that would successfully hoodwink the rest of the country. My own feeling is that we need not worry particularly about "planted jokers," although that does not mean, of course, that we should not be on our guard against the purely accidental kind.

JOHN HARVEY SHERMAN: There are two kinds of "joker": One is the kind that is deliberately planted in a bill with false intentions; the other is the kind of "joker" that the purely academic or purely legal mind discovers in the terminology of the bill after it has become an act. This latter is the kind of "joker" which I believe many of us are afraid of. Surely the gentlemen who advocate the Aldrich plan can have no objection to a thorough examination into the terminology of this bill for the purpose of discovering whether there be any of this kind of "joker" present. To do so casts no reflection either on the authors of the plan or on those who now advocate it.

E. DANA DURAND: I might say that in our work in the Departments, we are often confronted with just this sort of trouble. Court interpretations of enacted laws often make them utterly ineffective through giving them meanings which were entirely unsuspected when the bills were passed.

PROFESSOR KEMMERER: The hour for adjournment has arrived and I shall only take time to refer to a couple of points made in the discussion.

Professor Clark makes the point that the plan of organization

is too complicated and the methods of electing directors too indirect. I agree with him that these are defects of the plan, but see no way of avoiding them without bringing in greater evils. It is important that the scheme of organization should be centralized and should be closely knit together. This requires a certain amount of complexity, and of indirection in the methods of election. The scheme of organization which I have proposed is considerably simpler, and more direct than that proposed by the National Monetary Commission.

Mr. Knauth believes that a majority of the directors of the central board should be appointed by the government and should represent the public at large. There is much to be said in favor of his proposition. It is difficult to tell just where to draw the line in apportioning power between the banking community on one hand and the public at large on the other. Any plan which is to be enacted into law will require the support of the public at large and also of the banking interests. It is a case of steering a safe course between *Sylla* and *Charybdis*.

THEORIES OF DISTRIBUTION

ROUND TABLE DISCUSSION

Leader, SIMON N. PATTEN

University of Pennsylvania

S. N. PATTEN: Theories of distribution have been treated as a part of static economics. No attention has been paid to the influence evolution has had in changing the nature of the distributive struggle. Instead of having shares fixed by natural law the pressure of social struggle moves the surplus from share to share, and finally places it in the hands of the consumer. The economist should describe this process instead of seeking natural laws to determine the mode of distribution. Two problems thus present themselves for discussion:

1. Does the present theory of distribution help materially in the solution of practical problems? If so, what problems?

2. Is there one social surplus in which all classes participate, or are there funds set aside for special classes, which funds cannot be appropriated by other classes? One view is that of class struggle, the other is that of class equilibrium.

The latter problem should be discussed first and is the more important. To do this the reasoning of the old static theory should be contrasted with the newer evolutionary view. In a primitive society the formula of distribution is $\frac{P}{N} = W$, that is,

the total production of an undifferentiated primitive society divided by the number of workmen gives the normal wage of each worker. When evolution begins the product of evolution and the social surplus are the same sum and vary together. A new formula for distribution is now necessary, which is $\frac{P-S}{N} = W$. Transposed, this formula becomes $NW + S = P$. This means that the social surplus is not distributed as wages but becomes the income of special classes, and is distributed by other laws.

In contrast to this formula the traditional formula of distribution is $R + I + W = P$, that is, the sum of rent, interest, and wages equals the total produce of industry. The evolutionary formula assumes that the social surplus is one fund distributed by social laws, while the static view assumes that the surplus is di-

vided into three fixed funds, each distributed by its own natural law. The issue on the one hand is between a unified and a divided social surplus, and on the other, between the power of natural and social law. The measure of social law is in this case budgetary pressure. The real problem in distribution is thus shifted from the classes into which nature is assumed to divide producers, to the forces that control the standards of living which the various classes impose on its members.

B. M. ANDERSON, JR.: I have been over Professor Patten's *Reconstruction of Economic Theory* pretty carefully three or four times. There are a host of interesting things in it, but I wish to confine myself to two or three points. Professor Patten's criticism of the categories of rent, wages, interest, and profits seems to rest on unusual uses of the terms. Thus, he seems on pages 36 and 37 to make wages the result of *toil*, and toil seems to mean *pain*. I quote: "If a dynamic economy should continue, interest and wages would tend to disappear, and the whole income of society would be distributed as rent or profits. Work would be a pleasure, and the providing for the future a joy. Of course this is Utopian, but it represents tendencies." And on page 39: "Machine tending is not toil unless the hours of work are abnormally extended." The machine workers, he thinks, should be conceived as getting rent rather than wages, that is, rent of ability. Numerous other passages suggest these unusual meanings of the terms. Now I do not question Professor Patten's right to define the terms in any way he pleases. But I do feel that his criticism of the familiar categories, when he gives them unfamiliar meanings, is beside the mark. Wages are not usually defined as that which is paid for pain. Wages are commonly conceived as the share going to laborers, whether their labor is painful or not. It may be well to think of rent as a surplus of pleasure over pain for certain purposes, but rent in common economic usage means the price paid for the use of land. Now as long as there are big classes of men who, not owning the instruments of production, work under the direction of others and receive a stipulated income therefor, it seems proper to me to group them together as laborers, and to call their income wages. If you wish to make further distinctions within the group, well and good. I think Professor Patten's emphasis on the difference between skilled, organized labor, and unskilled, unorganized labor, is much to the point. But

really, modern differentiation in industry, and modern corporate organization, with its leases, stocks, bonds, and salaried and wage-earning employees, seem to me to make the old categories of wages, interest, profits, and rent clearer and sharper and more applicable at present than they were fifty years ago. Subdivisions in them are needed, and perhaps a category or two in addition. Further, across this old classification, we may shoot the distinction of monopoly and competition, or make other cross-classifications. But I think it would only lead to confusion to take certain classes of income out of the wages class, and assimilate them to profits or rent.

There is, of course, nothing sacred about these categories. They are the prevailing *legal* categories. They are peculiar to the present legal and social order. We have no right to identify them, *by definition*, with the product economically attributable to the several factors of production. Such an identification, if made at all, should be the result of a theory, rather than its starting point.

Professor Patten's chief reason for objecting to these categories seems to be that he has a new explanation, or set of explanations, for distribution, and he wishes to make the categories on the basis of his theories of explanation. Now this seems to me a line of procedure which will make agreement on categories needlessly difficult. We can agree on our *problems* much more easily than we can agree on their *solutions*. We should choose our categories in terms of the problem phenomena, therefore, rather than in terms of the *explanation* phenomena. It is, moreover, a hopeless task to try to separate out a special type of income for each separate cause which affects distribution, and to make a category of distribution for each different cause. In doing this you neither explain your type of income completely, nor do you exhaust your account of the effects of the cause in question. For several causes will affect each type of income, and each cause will affect more than one type of income. Only by basing the categories on the problem, that is, the concrete sort of income actually received, can you get a manageable set of categories, and a useful set of categories.

But Professor Patten is raising some much more fundamental questions than those of terminology. He is raising the question of *causation*, and challenging the doctrines that make distribution depend on "natural law," or on the static price analysis. He would

introduce the elements of struggle, monopoly, legal changes, changes in education, in morals, in standards of consumption—a whole organic complex of vital factors. In this I am happy to range myself with Professor Patten as an economic insurgent. It is an absolute illusion, in my judgment, to hold with the Austrians that you can solve the problem of distribution by starting with utility, passing to value, and then, by an imputation process, going to distributive shares—the whole process a rectilinear chain of causation, and the whole causal force coming from that initial utility—that is, individual desires for economic goods, or, with those who try to combine English with Austrian economics, individual desires and aversions in connection with the consumption and production of economic goods. You can't even make a logically consistent scheme by this method. It gets into a circle at the outset. And you certainly can't make a scheme that corresponds with reality. Distribution is fundamentally *caused* by the legal, moral, and social standards, institutions, etc., concerned with property right, inheritance, contract, etc., in interaction with more distinctly economic factors. And fundamentally distribution lies *behind* the very values, supposed to be derived exclusively from utility, which are to be distributed.

However, I do not think that we are obliged, on that account, to follow Professor Patten in throwing overboard the static price theories of distribution. The natural law theories we will throw overboard. Distribution depends on social laws. But these static price theories need not imply natural law. They give us, not indeed a very fundamental causal account of the distributive process, but they do give us a significant cross section picture. Here is a great genetic process, in time, of struggling classes, ideals, institutions, continually readjusting themselves to changes in each other, and in interaction also with the economic environment and the development of economic technique. They never do reach a static equilibrium, but they are constantly effecting partial moving equilibria. A change in the tariff will reduce the earnings of the Woolen Trust, but it will not lessen the rate of interest on their capital, because through the capitalization process that capital value will be reduced till it again yields the prevailing interest. And so the static theory of interest still gives us a true picture, even though, in this case, a very superficial one. But it has to be superficial, in considerable measure, in order to be quantitative. What Professor Patten

offers is only qualitative as yet. To get quantitative measurement of the forces he names we must compare them with other forces; must, that is, see them in equilibrium with other forces; must, that is, turn to our static, cross-section picture. That the static theories have considered too few elements I should insist. That they have often been based on an erroneous value concept I should insist. But I think there is no occasion to throw them overboard, and that they supplement, rather than exclude, Professor Patten's genetic account. The net result seems to be that we have to thank Professor Patten for emphasizing factors that have been too much neglected, and that we shall have to do a lot of work before we get a theory which will adequately coördinate the factors which he mentions with those already recognized; but that the modern theories of distribution, at their best, are incomplete rather than wrong.

W. M. ADRIANCE: For one who has not had the privilege of intimate association with Professor Patten, there is a certain presumption in playing the rôle of critic of his views. To form a true judgment one must have a certain grasp of, and sympathy with, his original way of looking at things, and must be able to interpret his somewhat paradoxical forms of expression. If my remarks seem unfair, I trust that you will bear this in mind.

In the first place Professor Patten, in his recent monograph on the *Reconstruction of Economic Theory*, does not conform to certain criteria which he himself has given us. In his presidential address at Atlantic City he made a plea for the *intelligible* presentation of economic truth, to the end that the economist might exert a more real influence in the everyday world. He went so far as to say that we should all be journalists,—the reference being, no doubt, to a popular and intelligible way of writing. But this recent essay is anything but a popular and straightforward exposition. It seems needlessly involved, paradoxical, and obscure.

In the second place, certain commonplace matters are ingenuously presented as if they were novelties. The doctrine of evolution is not absolutely unknown to the present-day economist, as seems to be naïvely assumed. Nor is it a novel idea that present-day distribution is the resultant of a multiplicity of forces.

When, however, Professor Patten discovers in certain of these forces, such as the budgetary discrepancies illustrated on the blackboard, an explanation of the rising price level, he seems to

show a confusion of thought, which is widespread, no doubt, but which an economist should avoid. The rising price level is one thing: the rising cost of living is another. One involves a relation between money and the things which are bought with money: the other involves a relation between expenditure and income. Various forces may operate to increase expenditure relative to income, and maladjustments may of course occur at a time when prices expressed in money are falling or stationary. So that the budgetary discrepancies in which Professor Patten is interested cannot be accepted as an explanation of the rising price level.

My main criticism, however, is that Professor Patten is "reconstructing" the theory of fifty years or more ago. He calmly assumes that the "wage fund" theory is currently accepted, and that we believe today that society is divided into three classes, each receiving its income from a specific predetermined source. Apparently this "reconstruction" has been undertaken without any survey of what contemporary economic theory really is.

In this connection I would say a word in behalf of the school of thought to which my own allegiance is given. I shall call it the "subjective value" school, rather than the Austrian school, for the American followers of the Austrians differ from them in certain important particulars. We believe in a general theory of value, with emphasis laid on subjective estimates, and we consider that such a general theory is a *sine qua non* to any science of economics. Our view is not to be condemned as "monistic" rather than "pluralistic" for we recognize the multiplicity of forces, social and individual, which combine to determine subjective estimates. We accept, as a matter of course, the evolutionary point of view, and we feel that our brand of theory has not only not been "reconstructed," but it has not even been considered by Professor Patten.

L. N. ROBINSON: In his address to the American Historical Society, Colonel Roosevelt suggested that historians should make the dead facts of the past live again. It seems to me that Dr. Patten has done this in his monograph, not, however, that future generations might see them in all their strength and vigor but rather with the express purpose of putting them to death again. His revival of natural laws and of funds is an indication of this.

At times, it would appear that Dr. Patten seeks to identify the shares in distribution with the various social classes. I doubt if this

can be done. A share in distribution denotes a means of enforcing a claim to the new wealth. The holders of one of these means may belong to several classes.

In saying that we need a new theory of social progress, I believe that Dr. Patten has called attention to a decided defect in economic theory. Happiness cannot serve as the test. As he says, we evolve through misery as much as through pleasure. To base economic theory on an outworn ethical theory is suicidal.

The monograph is, as previous speakers have said, difficult to interpret on account of a peculiar use of terms. After reading it, one feels the need of securing a new dictionary rather than of reconstructing one's economic theories.

SUMMARY.¹ In the discussion which followed, a score or more of speakers took part under the five-minute rule, and many briefer questions were answered by the chairman of the session. There was some expression of agreement with the several leaders of the discussion to the effect that the opening address did not take sufficient account of recent progress in economic thought or give a just impression of the best contemporary economic doctrine. But there was also some opinion that further development is needed along lines suggested in the opening address. An animated debate was elicited by some of the more incidental propositions advanced by Professor Patten, particularly that teachers' incomes are, as to social nature, to be classed with those of the larger capitalists, that insurance by members of the middle class may be a hindrance to progress by relaxing the social motives, and that the extension of social insurance into a general system for all workers may divert from the true road of progress. As Professor Patten's reasons for these views are not set forth at sufficient length in the foregoing summary, it is not well to restate the protests against these views made by a number of speakers. The discussion as a whole was more animated and participated in more generally than any session on economic theory at the Association meetings for many years.

¹ Written on request of the Editor by Frank A. Fetter.

FARM MANAGEMENT

ROUND TABLE DISCUSSION

Leader, H. C. TAYLOR

University of Wisconsin

Agricultural Economics treats of those economic forces with which the farmer has to deal. Some of these forces relate to the problems of production, others relate to the problems of distribution. On this occasion the aim is to direct our attention primarily to the problems of production, popularly known as farm management.

This field, called by some the economics of farm management, by others simply farm management, long remained uncultivated by scientific men. Practical men have plied this art more or less intelligently since the earliest time. Furthermore, many of the earlier agriculturists were economists rather than chemists or biologists. With the development of chemistry, bacteriology, and other physical and biological sciences, the economic aspects of the questions of farm management were left to the farmer unaided, while the new sciences were used in every conceivable way to throw light upon his problems. This resulted in the one-sided development of our agricultural education, which accounts for the fact that the wise farmer mistrusts many of the statements handed him by the colleges and experiment stations. Only recently, the chemist of a western experiment station published the statement that the farmers of the state were losing \$25,000,000 annually because of the way in which they were handling the manure produced. The chemist was asked if he had deducted the costs of introducing his methods of saving the manure. He had not, and the farmers may rightly ask the question: What part of this \$25,000,000 will be added to our profits if we use more labor and capital in caring for the manure on the farm?

The insight which the physical and biological sciences can give to the intelligent man who is producing crops and live stock for profit is invaluable, but, without the guiding hand of the man with the economic viewpoint, scientific agriculture is a ship without a rudder and well deserves the opinion many practical men hold regarding it.

It is unfortunate that so little attention is given this subject by

men of economic training. Fortunately, however, the field is not being left without workers. Men from many other branches of agricultural investigation have observed this unoccupied field and entered with energy upon the work of gathering the materials for a new science—the science of farm management—including the whole business side of agriculture. These men have entered upon this task without the economic training which might well be desired, but, while progress is slow and expensive, the outlook is hopeful. It appears that agricultural economics is likely to be benefited more by the men without economic training who are working in the field than by the men of economic training who are not working in this field. This much to call the attention of economists to this important line of work.

Some of the problems of farm management which require the attention of the economist will be briefly summarized—the choice of a farm, the size of the farm, the crops to grow, the method of realizing on the crops, the kinds of live stock to keep if any, and numerous other questions which relate to the question, "What shall I do?" Many other questions relate to "How to do it." The problem here is one of proportions,—for example, the problem of proportions between land, labor, and equipments in growing a given crop; the problem of proportions between expenditure for food and for shelter; the problem of proportions between investment in feed and in cows in the dairy business, etc.

The question of the proper proportion between land, labor, and equipment, commonly called the problem of intensity of culture, is one of vital importance today. Land has increased in value; so have the products of the land, and great leaders like J. J. Hill are asking that the produce per acre be doubled. The question is thus raised as to the proper degree of intensity of culture under the new conditions. Upon the proper solution of this question depends the profits of the farmers and the welfare of the nation.

The economic forces which determine what the farmer should do and how he should do it lend themselves to inductive study. The historical, the geographical, the statistical, the accounting, and the experimental methods are all capable of being used effectively in this field. These methods all throw light upon the problem, but when they have been used to their fullest extent, farm management will remain a business in which the offhand judgments of the operator from day to day must be made in the midst of a

high degree of uncertainty. This is true not only because of changing conditions as to production and marketing, but also because of the highly uncertain quantities of the laborers upon which the management must depend. The farm labor problem occupies the center of the stage as soon as one leaves academic halls and state experiment farms and enters upon the less remunerative task of managing a farm for profits. How to secure labor and how to direct labor in a profitable manner in farm work may well receive much attention in this discussion.

T. N. CARVER: I have been in the habit of dividing the problems of farm management under three general heads: (1) primary problems of investment; (2) problems of internal administration (farm management proper); and (3) problems of buying and selling.

As already suggested, the students of farm management have given their chief attention to the second of these heads, with a good deal of incidental attention to the first. Under this should come the question of the kind of land to buy, the kind of equipment, stock, etc., and especially the great law of proportionality in its application to successful farming.

So long as the farmer is growing staple crops, for which there is a well organized market and which always sell at a quotable price, the problems of buying and selling are doubtless of less importance than the other two groups. The great problem for the farm manager under these conditions is to reduce the cost of production under his efficient administration. But in proportion as agriculture becomes specialized, or as the farmers engage in the production of agricultural specialties, in that proportion do the problems of buying and selling rise in importance. There is an undoubted tendency toward this kind of agricultural production, and therefore it is safe to say that the problems of buying and selling are as a matter of actual historical fact increasing in importance every year. It would probably not be very far from the truth at the present time to say that they are the most important of all. For every farmer who can buy and sell his products successfully, there are probably ten who can grow them successfully. Or for every farmer who fails in business on account of his inability to grow crops efficiently, there are probably ten who fail on account of their inability to buy and sell to advantage.

One of the fundamental problems of farm management, however,

which has hitherto received but little attention, is that of determining what constitutes good farming. This probably comes under the first of the three headings. The question as to what constitutes good farming is pretty nearly summarized in the question: Does good farming consist in getting a large product per acre or a large product per man? A recent writer in *Wallace's Farmer*, in comparing the agriculture of Iowa with that of Bavaria, reaches the conclusion that in Bavaria the average acre is about seven times as efficient in catching and storing up the sun's energy in the form of crops as the average acre in Iowa; but that the average farm worker in Iowa is about six times as efficient as the average worker in Bavaria, according to the same test. Now it is very easy for long-distance farmers to expatiate on the superiority of Bavarian agriculture, but the farmer who is in the actual business of farming is not so much interested in the product per acre as in the product per man. It is upon the product per man that the well-being of the average farmer depends. And it must be borne in mind, therefore, that a larger product per acre is desirable when, and only when, it can be secured without the slightest diminution in the product per man. The American farmers' use of labor-saving machinery has been designed mainly to increase the product per man, and has had comparatively little effect as yet in increasing the product per acre. There must be no reduction in the amount of power and machinery used by the American farmer. If he is to get a larger product per acre, it must be done not by dispensing with machinery and resorting to methods of hand cultivation, as is done in older countries, but by the use of even more machinery than is now used and, in addition to this, a greatly increased use of fertilizers, and of scientific knowledge. This is a problem of farm management which is fundamental, not only from the standpoint of the individual farmer, but from the standpoint of the nation at large; for upon this depends the character of rural civilization and the standard of living of the farming people.

C. K. GRAHAM: It is an old but nevertheless a true saying that "necessity is the mother of invention." Probably all of you know that Hampton Institute is an industrial training school for the Negro and Indian. Many years ago a six-hundred acre farm was given to us with the expectation that it would answer a two-fold purpose, first, to furnish a source of revenue, and, second, to

give boys some agricultural training. We gave these boys employment for a year, paying them for the work and permitting them to go to night school, the money earned being used to defray expenses while in day school the following year. Seven or eight years ago it was about decided that we could better afford to make these fifty boys a present of the one hundred dollars or so that each earned, as the farm was being run at an annual loss of many thousand dollars, to say nothing about the waste of energy on the part of the administration.

Five years ago when taking charge of the agricultural department I was told that the trustees felt they had had about all the experience with this Shellbanks farm they could afford, and that we either had to demonstrate that the farm could be made to pay expenses or we should have to cease advocating agriculture as a means of earning a living. To put it plainly,—we either had to make good or get out.

We have found the people in the Department of Agriculture at Washington, D. C., are only too glad to help when asked for assistance. At our request the Bureau of Farm Management sent men to look over the farm, make a survey, and give us some idea of where we were losing our money. Our money crop was milk; that is, we could sell all the milk we could produce. With the equipment then on the place we found we could easily care for and milk 100 to 150 cows, the only question being economical feeding. To profitably produce a certain amount of milk it was necessary for us to grow feed not only for these 150 cows, but for many heifers and calves, as well as for 33 horses.

This was by no means the only problem that came up. Most farmers can hire men for five or eight months in the year, while we have to find work for our boys for the whole twelve months in the year. We therefore had to arrange our work so that both boys and horses were continuously employed, and I may say that we have so far succeeded that we now have 35 boys and 25 horses doing the same amount of work that it took 51 boys and 33 horses to accomplish five years ago. A very interesting feature is that these boys not only do the work, but do it with greater ease and less friction. The horses also are in much better condition than ever before.

While we are not securing much larger yields per acre, we are getting a great deal more from the land than we were at that time. In the South, especially in our section, we make it a point

to work our land continuously. The winters are mild. We sow oats, wheat, and rye in the fall; in fact, we can sow oats up to about the middle of November. We can plow practically every day in the year. We plant potatoes about February 15th, and begin planting corn about April 15th, so that by careful planning or figuring ahead we can keep our boys and teams in the field the year round.

The farm is surveyed and blue prints have been made, each field measured and numbered, and recorded in our ledger under that number.

At the end of the day each boy makes out a slip stating the field or fields in which he has worked, the names of the horses or mules, and the kind of work he was doing; that is, whether he was plowing, harrowing, or whatever it may have been. Should it happen that he was hauling manure, he writes on the slip the number of loads, and the place from which it was hauled. In this way the dairy, horse barn, and piggery get credit and the field is charged with the manure as well as with the time required to handle it.

These records have brought out some peculiar facts. In the first place we find that only about 75 per cent of the total time was charged in definite fields; that is, about 25 per cent of the time is spent in chores. Now by chores we do not mean working in the dairy, poultry, or piggery, because we class these as separate industries with special boys to look after them. But what we mean is actual farm chores, such as repairing tools, bridges and fences, digging ditches, etc. We have also found that some of the more common crops have not been grown by us with a profit. For instance, alfalfa, which is advocated nearly everywhere, costs us practically \$50 a ton for the first ton taken from the field, and we have never yet had an alfalfa field that has paid expenses.

Ensilage corn, which in almost every section is very profitable as a green feed, has not proved as profitable on our farm as soja beans or cow peas. That is, these two crops cost much less to harvest, and leave the land in such excellent condition that we can better afford to grow them, and many times we have had nearly as many tons of green soja beans from a field as we have had green corn.

We have also found that certain horses are boarders; that is, whenever possible boys avoid working them. By keeping a time

book for horses just as we do for the boys, we find we have a few that are often "off feed" or not satisfactory for certain particular tasks. They do not appear to be idle often, but still often enough so that in the course of a year figures show that in one or two cases it would have paid us to have killed them rather than to have fed them.

Now ladies and gentlemen, all of you who know anything of farming know that the average farmer is always behind with his work. Chores have been left undone for weeks, and if you should mention it to him he would say, "Yes, I intended to do that, but as yet have not found the time." Now this is nothing more nor less than a lack of good management; the man has not figured ahead. Here in Massachusetts I should expect that you would want to plant corn about May 15th or possibly May 1st, and know that a certain amount of work must be done before that time; a certain number of acres must be plowed; a certain amount of manure hauled; a certain amount of harrowing done; and you have about so many days' work in preparing roads and bridges and fences. Certain time must also be allowed to cut and haul wood and coal, and do the hundred and one small tasks that come into every farmer's life. We have found that it pays to take a day once in a while and figure out just how many days' work must be done before we can get to certain tasks. From week to week and month to month we check up to see whether we have accomplished as large a proportion of the work as we had expected, and by checking ourselves in this way it is quite easy to keep ahead. Often we find our work one or two weeks ahead of the time we estimated, and it is seldom that we cannot take on a little extra work or outside contracts that otherwise we should think impossible.

J. A. VALENTINE: The relation between accounts and accounting is that between the facts of a science and the science itself. Facts are the groundwork of, for example, history; the science of history concerns itself with the analysis, coördination, and interpretation of the facts. Facts are likewise the groundwork of biology, astronomy, chemistry, physics, and other sciences. It is the business of the biologist, the astronomer, the chemist, the physicist, to correlate and interpret the facts—to explain their meanings and relations.

Accounts record the facts of a business. Accounting analyzes

and interprets the facts so recorded. That is, bookkeeping shows what takes place in a business, while it is the function of the accountant to take the facts thus gathered, and in the light of other knowledge which he has, to sift the important from the unimportant, to make clear the relation of the facts to one another, to analyze and classify them, and to interpret the whole body of data set forth in the accounts, to the end that the present condition of the business may be clearly understood and that its progress—or the lack of it—and the reasons therefor may be shown. It is for the accountant to determine from recorded facts whether the business is being conducted economically and efficiently, and to ascertain the effects of changes in methods.

Now, are accounts and accounting, as thus defined, of any use to the farmer or to the economist interested in the problems of farm management?

It is obvious that before we can pass judgment on the economic facts or status of an enterprise—before we can say that it is economically efficient or the reverse, that it is profitable or unprofitable, or that changes in methods would or would not be beneficial—we must know what the facts of the business are. In other words, before we can reason about what is happening, before we can commend, criticise, or intelligently suggest changes, we must know what *is* happening.

This is a truism so obvious that it needs but to be stated to be admitted. Yet we find that in the case of one of our greatest industries, agriculture, the operators, in contrast to almost all other business men, *do not*, in the vast majority of cases, know the facts of their business—they have not kept accounts, and do not know exactly what is happening.

It is therefore plain that one of the first duties of the student of farm management is to emphasize the truth that progress in the solution of many of the economic problems of agriculture is directly dependent upon the gathering of facts which will show what actually happens—that is, upon the keeping of proper accounts. In the absence of definite data, we may speculate and theorize and spin hypotheses about the business problems of the farm—as the old philosophers used to spin hypotheses about the constitution of the solar system, without much knowledge of the facts of astronomy—but, if we are to make real progress towards more effective work on the farm, we must know the real facts—we must have data.

Having secured the data, the next step is to find out what the facts really mean—to interpret them. From the standpoint of the solution of the problems of farm management, it is very much more important to know what facts mean when you get them than it is to gather an undigested welter of miscellaneous data.

No one will get anything very useful or important from the facts revealed by farm bookkeeping, who has not a fundamental grasp of the economic forces at work in the field of agricultural production. If he lacks that understanding of agricultural economics, if he is a mere bookkeeper and compiler of facts, he is sure to go far astray when he attempts to solve by bookkeeping and accounting methods the complex problems of farm management.

In the attempt to make bookkeeping and accounting contribute to the solution of these problems, crude work has unquestionably been done. This has had two results: (1) it has, in the minds of some, discredited bookkeeping and accounting as methods useful in the solution of these problems; and (2) it has aroused, in the minds of others, unreasonable and unwarranted expectations as to the possibilities of this method.

There is therefore especial need of a clear statement of the relation of the accounting method to the problems of farm management. If it can once be made plain what accounting can do to help the student of farm management, and—equally important—what it *cannot* do, we shall neither fail to use this method where it is applicable, nor demand impossible things of it.

Much of the accounting work that has hitherto been done in connection with farm management, and unfortunately some of it that has been published, can only be characterized as naïve. The theory has apparently been this:

"We will keep cost accounts to determine the cost of producing various crops. We shall thus find out what crops and industries pay best on the farm. Then we will raise the most profitable crops and adhere to the most profitable industries, discarding the less profitable or unprofitable branches of production. It has been shown, for example, that we can weed out the unprofitable cows by the use of the scales and the Babcock test. Now we shall proceed, by means of cost accounting, to weed out the unprofitable crops and industries—and forthwith our problems will be solved and we shall live happily ever after."

Our friends then go to work with pencils and ledgers. They

gather data from the farmers, they determine the cost and distribution of man and horse labor, they figure interest on the value of the land, buildings and equipment used, they calculate all the other expenses involved, they average, they estimate, they compile—and finally there are evolved tables showing the average cost of producing wheat, corn, milk, or what not. To those of us who are hopefully waiting at the portals for further light on the problems of farm management, the result is held up as a useful guide in practical farming operations.

While we must admire the industry and good intentions of the busy compilers, we cannot but regret that the importance of their results, and the accuracy of their reasoning from them, are often seriously lessened by their failure to grasp the significance of the farm as an economic unit, and by their lack of knowledge of the theory of the by-product—a theory that is well understood by many of the better commercial accountants, but which is unfortunately still largely an unknown quantity to most of the agricultural fraternity.

It would indeed be pleasant if the only business problem of the farmer were to figure out, by cost accounting methods, or have figured out for him, the most profitable crops and lines of production, and then to develop these and abandon the rest.

Unfortunately, this is not the case. If the average farmer could devote all of his time and energy, throughout the year, to one or two things, it might be possible to arrive at some such simple solution. The average farm, however, is a business unit made up of several more or less related industries, producing a number of different products which claim the time and attention of the farmer at different times and in different degrees.

The business problem of the farmer is so to select his lines of production and so to combine different products or industries as best to utilize his land, labor, equipment, working capital and executive ability, and to realize the *largest net profit* from his farm as a producing unit.

The most profitable combination will vary with the farm, the farmer, and with conditions off the farm. That is, the most profitable combination will not be the same for different farmers on a given farm at a given time; or for a given farmer on the same farm at different times; or for a given farmer on different farms at the same time.

Therefore it will never be possible, by the accounting method

or in any other way, to lay down specific rules good for all times and places and for all men, or to say generally exactly what a farmer should or should not raise or do. It is much more important to develop correct methods of reasoning about the business problems of the farm than it is to provide specific solutions which are good only for a given farmer at a given time and place.

Progress in the solution of the problems of farm management depends, as has been said, upon the gathering of accurate data—but it depends, much more, upon the correct interpretation of the data gathered, which in turn depends upon a knowledge of the economic principles involved. How necessary this knowledge is, and how easy it is to go astray without it, may best be illustrated by concrete examples.

If you should say to a dairyman: "It may be good business to produce milk at 6 cents per quart and sell it for 3 cents per quart, or even to throw it into the gutter," he would probably be inclined to doubt your business judgment or even your sanity. If, however, you were to say to him: "It may be good business to knock calves in the head at birth, and if necessary go to the expense of burying them," he would, if he is familiar with the conditions of the dairy business in some parts of the country, probably recognize your statement as entirely valid in some cases. He knows that if cows are to be kept at a satisfactory level of milk production calves are necessary, even if it costs money to get them and even if it does not pay to raise them and they are worth less than nothing when born, as they may be. If the agricultural cost accountant finds that milk is being produced for 6 cents and sold for 3 cents or even being thrown away, he may, if he is of the naïve school previously referred to and is shortsighted enough to examine only a part of the economic facts, join the average man, who is equally shortsighted, in nimbly leaping to conclusions in condemning the business folly of such a practice. Yet such seeming folly may easily be shown to be business wisdom under some circumstances. For example, a man is engaged in the raising of pure-bred dairy cattle. The prices he is able to secure for the stock depend on the records his cows are able to make. To make records the cows must be milked. If by reason of the records made the stock brings sufficiently high prices, the breeder may well be able to afford to sell his milk at less than cost. If it should happen that there were no market for the milk which would make it worth while to pay the necessary costs of delivery,

the milk might conceivably be thrown away entirely. In this case the milk is a by-product, pure and simple. Whatever is received for it, less the costs of delivery, is gain, whether it covers the other costs or not. It may happen that the gains from the live stock alone would not be sufficiently large to justify selling the milk at an exceedingly low price or giving or throwing it away, but that if *something* near the cost of production can be secured, even if the whole cost is not covered, the business can be conducted at a profit.

Take another case. Suppose data had been gathered on the cost of producing, under given conditions, a number of different crops. All cost items have been included—the cost of man and horse labor, the machinery charge, cost of seed and fertilizer, cost of harvesting the crop, and interest on the value of the land used. It is found that at a given scale of prices some crops pay a much higher return per acre or per hour of labor than others.

Shall we, then, choose only those crops which pay the highest return? The agricultural cost accountant of the naïve school might reply in the affirmative. But let us examine *all* the facts. After doing so we may reach some very interesting conclusions. For instance:

1. It may be good business judgment to include among the crops raised one or more which are far down in the scale of net returns.
2. It may even be wise to raise one or more crops which show no net profit whatever when charged with all costs, including the rent of land and full price for labor.
3. Two crops which both show high net returns may result in less profit to the farm than two others which are both lower in the scale of net returns.

How is it possible that conclusions like these, which seem to contradict the facts, can be valid?

These conclusions are valid because in addition to the net returns per acre or per hour of labor, *other factors* enter into the problem of the selection of crops and produce a definite effect upon the net returns of the farm business as a whole. We must carefully consider, for example:

1. The demand which a given crop makes upon the labor supply of the farm.
2. The effect of the crop upon the fertility of the soil.

3. The place of the crop in a rotation.
4. The incidental benefits or drawbacks of the crop.

The effect of these factors may well be examined a little more in detail.

1. Two crops, both highly profitable from the standpoint of net returns, may make demands upon the farm labor supply at the same time, so that each crop limits the amount of the other that can be produced, and both, while giving profitable employment to the farm labor for a limited time, may leave it entirely without profitable employment at another period.

2. Some crops make much heavier demands on the soil than others, and either require expensive fertilization to restore the soil to its former condition of productiveness or leave it in an exhausted condition.

3. The same crop cannot, as a rule, advantageously be raised continuously on the same soil. A rotation is usually indicated. Some crops which are relatively unprofitable may, when combined with other crops, result in a larger net profit than other crops apparently more profitable, which, however, fail to meet the needs of a good rotation. Also, a crop which cannot even bear its full charge for labor or land rental, or both, may in combination with other crops in a rotation result in a larger net profit than another crop apparently more profitable, but not adapted to the rotation. That is, a crop apparently raised *at a loss* may be profitable to the farm as an economic unit.

4. A crop apparently unprofitable may really not be so, because it prepares the soil for profitable yields of crops to follow, by improving the tilth or supplying humus or nitrogen to maintain fertility and producing power.

These facts make it clear why it is that two apparently highly profitable but competing crops may result in less net profit than two apparently less profitable but non-competing crops—why it may be good business to include in the cropping system crops apparently relatively unprofitable. They also indicate the danger, for the man who is eager to apply business principles to the solution of his farming problems but who lacks training in the fundamental economic principles that underlie agricultural production, that lurks in some of the cost statistics which have been published.

What help, then, may reasonably be expected from accounts and accounting in the solution of the complex economic problems of farm management?

1. The more general practice of keeping simple financial (not cost) accounts among farmers—whether the accounts are kept by the farmers themselves or are kept for farmers by associations, colleges, or the Department of Agriculture—will enable them to ascertain the solvency of their business at stated times and to find out whether the business as a whole is progressing or regressing.

This is fundamental to the permanent success and prosperity of the farmer. When land values and costs of all kinds were low, and when the rise in the price of land usually more than offset any losses due to poor business management, the keeping of accounts and a knowledge of the real condition of the business were perhaps less necessary. Now, however, high-priced land, labor, feed, building material, and the high cost of living in general make the margin of profit narrow at best. If the farmer is all the time unconsciously "running into the red," as bookkeepers say, business disaster is ahead of him. Accounts will show whether or not this is the case.

If the business as a whole exhibits consistent annual gains, the farmer, if he wishes, may stop there, without inquiring whether or not the gain is a balance between certain gains and certain losses, and whether this net gain might not be made larger by eliminating losses. If, however, there are consistent annual losses, action must be taken or ultimate disaster is certain. A further study of conditions must be made and the losses must be stopped; or, if conditions are found to be such that the business on its present basis cannot be operated at a profit, a radical reorganization must follow.

Until farmers in general keep or have kept for them at least simple accounts, and have the facts which will show them whether they are solvent and in which direction they are moving financially, it is unreasonable to expect any very great progress in the solution of the more complex problems of farm management. A man who does not know and is not interested in the big economic facts of his business is not likely to take much interest in or give intelligent coöperation to movements for the solution of the smaller problems of farm management.

2. Cost accounting, when intelligently used by trained men, is a valuable means of comparing the economic value and usefulness of different crops, animals, machines, processes, and methods. If we know what it costs to produce different crops, under given conditions, and we interpret this information in the light of other

economic facts bearing on the problem of crop selection, this knowledge of costs will prove useful in working out a cropping system that will result in the largest net profit.

Similarly, the economic usefulness of different animals may be compared by means of cost records, carefully gathered and intelligently interpreted. What sort of cow is the most profitable under given conditions—a pure-bred or a grade, a large cow or a small cow, a cow giving much low-testing milk or less high-testing milk, one that is fed at high pressure or at a lower cost with a lower production?

So also with machinery. What is the value to the farm of a given machine? What does it cost to use it? Does it pay to use the machine at all? Would not some other machine do the work more cheaply? These again are questions which can only be answered correctly by gathering and interpreting the facts.

Is it cheaper to deliver milk by team or by automobile? Is it more profitable to make milk into butter and feed the skim milk, to wholesale the milk or cream, or to deliver at retail? What is the best form of barn to use—one which is expensive and warm and requires less feed for the cows, or one which is cheaper and less warm, but requires more feed for the maintenance of bodily heat?

There is an almost infinite variety of questions of this kind, affecting all that is done on the farm, which have in the past been given rough-and-ready answers on the basis of experience, or which have been answered by following traditions which may have arisen, and often did arise, in conditions which have entirely passed away, so that the thing continues to be done in a certain manner without any present reason, but simply because it has been customary to do it in that way. This is perhaps more true in farming than in any other industry.

These are questions which cannot be answered for all men, all times, and all places—the answers will vary with conditions—but for given conditions they may, in many cases, be answered correctly, and may only be answered correctly by gathering and interpreting the financial facts—that is, by cost accounting methods.

The great complexity of agricultural cost accounting makes it impracticable, in most instances, for the farmer to do more than keep simple financial accounts and supply such data as is needed for the further study of these problems by our agricultural colleges and by the Department of Agriculture. As no

final answers good for all times and all places can be worked out even by the latter, the study of these questions by experts must be continuous, and their findings, and the use made of them by practical men in the solution of everyday problems of farm management, must be subject to constant revision as conditions change.

Those who look to cost accounting as a sort of cure-all for the business perplexities of the farmer and as the means of solving, once for all, his economic problems, making his way thenceforth straight and easy, should recognize the futility of such hopes, and devote themselves to the correct solution, by the accounting method, of such concrete economic problems of a given time, place, and set of conditions as lend themselves to treatment in this way, and to the development of correct methods by which other similar problems, arising with changing conditions, may be solved.

RICHARD HITTINGER: When the Faneuil Hall Market was first established, there was no such thing as greenhouse produce, and no provisions were made for the marketing of such produce in the winter. Today the market gardener is in the market every market day in the year. He is at the mercy of the weather, hot, rainy, snowy, cold.

What should be provided is a covered market where he can get under shelter, and sell his produce without being exposed to these changes, not only for himself personally, but also because his produce would be in much better shape when it reaches the consumer. Take corn and peas, for instance. These and other vegetables are on the wagon, with canvas tied down to protect them from the rays of the sun and from dust. Being under cover, and if kept there some time because the market does not happen to be brisk, they are liable to "heat," and lose much of their natural sweetness.

In the winter months, with lettuce, celery, and other perishable goods, the wagon is covered well to keep out the cold, and when it is opened up the cold strikes in, and the vegetables are liable to be frozen before they can be removed to safety.

With a load of some two or three hundred boxes of lettuce and celery, it is hard to handle it in extreme weather without its being frozen. If it is chilled, the consumer gets a poor article. With a covered market the right degree of temperature could be maintained, the people could buy with more comfort, and it would

mean that the market gardener could maintain a more equitable price. It seems to me a subject well worth looking into.

W. H. BOWKER: I fear that I cannot contribute anything to this Round Table discussion. Farm management includes a good many things besides the running of the farm and keeping the accounts thereof. I want to say right here that running a farm is more complicated than running a business. I confess that it stumped me. When I was running my farm at Barre, I tried to introduce certain business forms similar to those which I used in my business, but I could never get them kept satisfactorily. My farm was too small a unit to enable me to employ a superintendent with head enough or time enough to keep the accounts and reports. Moreover, a working farmer or a working foreman has not the strength or inclination after a hard day's work to do it. Therefore, I discarded all forms and reports except the milk report of the cows and the cash account showing receipts and disbursements. The milk record of each cow was absolutely essential to determine whether my cows were efficient or otherwise—whether or not they were paying their keep with a profitable margin.

We must not complicate farm management, otherwise we will discourage the working farmer. Neither must we mislead him in the matter of coöperation. Coöperation is essential, but we must first teach him to coöperate in standardizing and selling his products. Products well sold will give the farmer a part of the needed quick capital with which to buy. Thirty-five cents of the consumer's dollar is too small a share for the farmer. He should, at least, have sixty cents of it, if not more. He cannot coöperate in buying until he has more quick capital or can obtain it from some source. The country banks should lend it to him, but as now conducted, they are channels by which the resources of the rural districts are drafted away to the city and there employed by bankers in speculation. It is much easier for country banks to loan their money on collateral security to bankers and brokers than to farmers, and yet what are banks in the country for except to serve the rural population, not alone in collecting, but in loaning funds in the community? I believe the national or state charters of rural banks should be canceled unless they are able to loan at least 75 per cent of their loanable funds in the communities in which they are located. Otherwise they defeat a part of the object for which they were chartered.

Finally, we must do everything we can to encourage the farmer to build up and maintain a home, for, as Henry Ward Beecher said, "The best product of the New England farm is its men and women." God help this country when its tillable lands are worked in units of one thousand acres or more. It is the small farmer, who works a quarter section or even a forty acre lot and at the same time maintains a home, whom we want to help in every way possible.

WILBUR O. HEDRICK: The place which Farm Management holds in the orderly development of courses of study in the curricula of agricultural colleges indicates the newness of the subject. Dean Davenport, of the University of Illinois, in a recent article in the *Annals of the American Academy*, summarizes this development as follows: Agricultural chemistry, founded by Liebig, was the original subject upon which agricultural education was founded; then came plant and animal pathology; then agricultural economics; and, finally, the organization of the farm,—the so-called "farm management."

In the presentation of farm management to classes, a basis in principle by which good pedagogical material is developed is easily found in using the law of proportions. This law is simply a redirected law of diminishing returns, and, since the essence of management everywhere is the right proportioning of factors, this law of proportions at once becomes paramount in teaching farm management. Specific examples of the dominancy of this law of proportions are furnished on every hand in technology, chemical science, and in art.

The management of farms offers the same opportunities for combining factors in the right proportions that are found in the spheres just mentioned, as may be readily seen in the proportioning of the three fundamental agricultural elements,—land, labor, and capital; of power to machinery; of the components of a balanced ration; of the size, number, and character of buildings to the size and character of the farm; and in many other instances.

The possibilities of practical farm management are strictly conditioned by the size of the farm. The medium-sized and large farms seem to offer the only chances that are worth while for the development of a real system of farm management.

FRONTIERS OF REGULATION AND WHAT LIES BEYOND

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For decades we have been working to break up the so-called trusts and restore competition in their place, but we seem to have accomplished little more than to reveal obstacles, obstacles that to many seem insuperable. Our dissolutions dissolve nothing: combinations are Protean, and we are baffled by shadowy communities of interest which seem to have no bodies we can grasp. Our lawyers perform inscrutable incantations, making many stock certificates grow where one grew before, but the people are not satisfied that these ceremonies have exorcised the spirit of monopoly from the body of large business. As a result, many are calling on us to cease the effort, to let business be monopolistic if it will, but to rob it of its power for harm by regulating the qualities and prices of goods and services wherever competition ceases to do this for us. Shall we follow this counsel?

The problems of regulating modern large-scale businesses are being worked out by our railroad and public utility commissions, in ways that are familiar to this audience. At one of the sessions of this society three years ago we were reminded that the most complicated and obstinate prices of all are already being dealt with by the Interstate Commerce Commission. After the bewilderments of railroad rates, any price problem of a mere manufactured commodity cannot but seem simple by comparison. It becomes the most natural thing in the world, then, to say "Let us make a commission to do for the trusts what the Interstate Commerce Commission does so successfully for the railroads," or "Let us follow the model of our best public utility commissions, and the path will be a plain one."

It is a dangerous thing for anyone posing as a scientist to make predictions that are likely to be proved, or disproved, in the near future. And in raising my voice against the rising tide of price regulation, I shall try to bear with fortitude the risk I run of sharing the legendary experience of King Canute. The only way of safety lies in treating the future from the vantage ground of past and present, asking first "What has been done already?"

and then, "How is the new task different from the old, and where will our stock of experience fail us?"

The thesis of this paper is that the fixing of levels of business prices and earnings is a subject about which this country does not yet know as much as many optimists suppose, that trust control by this method would raise new and serious difficulties of a kind not yet experienced, and that far from being the simplest way of handling trusts, this method, if carried out to the end, might unsettle our economic foundations in a way that would make our present perplexities seem trivial by comparison.

The choice we must make is not between regulation and destruction, as some seem to think, nor between regulation and *laissez faire*. The choice is between two kinds of regulation, one of which would admit monopoly and aim to prevent extortion, while the other policy, no less constructive than the first, would bend every energy to reviving and regenerating competition. This second policy will be found safer, and in the long run easier, than a program of price fixing.

I

In the first place, we have not completely settled the most fundamental problems even in the field of recognized public utilities, to say nothing of the new ones that trust regulation would raise. The Interstate Commerce Commission has not yet completely solved, has not had the opportunity and the machinery to solve, the problem of regulating the general level of railway charges. The greater part of their splendid work has been wrestling with single rates and discriminations, while the trust problem, if competition cannot be restored, is essentially that of the general level of prices and profits.

It is true that the Commission has handed down one decision involving the level of charges for half the freight tonnage and revenue of the country¹ and covering a region which extends from Chicago and the Mississippi River on the west to the Hudson River and Atlantic seaboard on the east, and from the Great Lakes and the St. Lawrence River on the north to the Ohio River and Norfolk on the south. Here, surely, is an instance of effective regulation of the general level of charges and profits. But as to whether this furnishes a satisfactory model for a permanent policy

¹ "In Re Investigation of Advances in Rates by Carriers in Official Classification Territory," XX I. C. C. Rep. 243.

of trust regulation, let the Commission speak for themselves. Their reply to the carrier's plea of necessity begins with these remarkable words: "Strictly speaking the Commission has no jurisdiction to hear and determine that question. We have no authority, as such, to say what amount the carriers shall earn, nor to establish a schedule of rates which will permit them to earn that amount."² And again, "We have no authority to say that a railroad ought to earn, either as a matter of right, or as a matter of public policy, any given percentage upon its value, but in discharging our duty, to say whether these particular rates . . . are just and reasonable, we must determine in a general way what a fair return would be . . ."³ Again: "We have been compelled to dispose of this case upon the evidence available . . . there is no testimony tending to show the cost of reproducing these properties. It is plain that a physical valuation would introduce into the calculation a new element which might lead to a different conclusion. The conclusion reached here extends, therefore, no farther than the facts upon which it is based."⁴

This is hardly the language of a body which has its own peculiar difficulties so well in hand that it can serve as a finished model for the regulation of trusts by the same methods. The effectiveness of the findings is made possible solely by the fact that the law laid on the railroads the burden of proof that the increased rates were reasonable. But the law does this, not in all cases, but merely when an increase of rates is in question, so that this legal weapon could not be used to force down rates that are already too high. This of itself is not necessarily a fatal weakness, for if Professor Fisher is right in predicting a generation of rising prices, then any unreasonable price, if forcibly kept at its present level, might ultimately become reasonable in comparison to the rest. However, the people are not likely to wait so long as that, and any policy of general price regulation must provide for lowering prices when they are too high by some method more effective than our federal railroad law now contains. If a physical valuation is demanded by the Interstate Commerce Commission as a necessary condition of effective work, how much more necessary will it be to a future Interstate Industrial Commission charged with price-making powers! And the physical valuation of all the large-scale

² "In re . . . Advances in rates . . ." *Op. cit.*, p. 243.

³ *Op. cit.*, p. 262.

⁴ *Op. cit.*, p. 305.

industrial capital of the nation is a task of whose vast magnitude we can have but little idea.

But there are other questions which are not by any means settled. In the first place, how allow for the fact that the prices that give reasonable earnings to some producers might bring ruin to others less efficient? To use again the words of the Interstate Commerce Commission: "There is no way by which such a condition can be remedied unless the government makes a direct appropriation for the support of roads in this condition."⁵ This question is one on which we have not yet heard the final word.

Another and still more vital issue is how to stimulate that progress in efficiency without which our multiplying millions dare not face the future. Fear of loss and hope of profits are the spurs to most improvements, and if we are to have a rate of dividend fixed by law we must furnish some substitute incentive for the one we have removed. With regard to this the Commission says: "Before any general advance in rates can be permitted it must appear with reasonable certainty that carriers have exercised proper economy in the purchase of their supplies, in the payment of their wages, and in the general conduct of their business."⁶ So far, so good. But farther than this the Commission will not go, for they say again: "This Commission is not a general manager of the railroads, and no matter what the revenue the carriers may receive there can be no control placed by the Commission upon its expenditure, no improvements directed, and no economies enforced."⁷ And in response to the claim of learned counsel that by "scientific management" the roads could save \$300,000,000 a year, the answer was that these methods were in an experimental stage only, and that they could not be allowed for in deciding the case at issue. Economy we may demand, but no innovations.

In some respects the best of our public utility boards are in a stronger position than the Interstate Commerce Commission. They have physical valuations, they can order and direct improvements, and they are in a position, if they choose, to furnish motive to further progress and economy by using the principle of the sliding scale, which has worked so well with the Consolidated Gas Company of Boston, and is so widely used in England. But these methods could not be carried over into trust regulation without

⁵"In re . . . Advances in Rates . ." (western case) XX I. C. C. Rep. 378.

⁶Op. cit., p. 243.

⁷Op. cit., p. 307.

losing most of their virtue. If the power plant of a particular city is backward, it can be ordered to copy the standards and practices of more efficient companies. But no industry can progress indefinitely by this method. The best plants, too, must go on improving. We must not merely "bring our line up to the colors" and stop there. Line, colors, and all must go on advancing. Costly experiments must be tried and innovations tested at some risk, if we are to escape from industrial backsliding, and these results cannot be secured by executive mandate or legislative fiat.

The sliding scale, on the other hand, furnishes a motive to continued progress, but it is useless for trust control, for it can be applied only to complete consolidations whose methods of production are very nearly static. The principle of this scheme is that the gain resulting from improvements should be shared between the consumer, who gets lower prices, and the company, which is allowed higher dividends, in some mathematical proportion, starting from certain levels which are taken as standards both of prices and of dividends. Thus economies bring increased gains to management and public alike.

Why does this not solve the whole problem? Chiefly because there is only a very limited field in which it will work properly. The whole success of it depends on leaving it undisturbed for a considerable term of years without tampering with the standard rates on which the calculations are based. This means that businesses that are progressing rapidly cannot use it, for they may be revolutionized at short notice by inventions which would turn existing scales of prices into absurd anachronisms and would cause an irresistible demand for revision. It would be absurd to allow a corporation to earn 20 or 30 per cent dividend for six or eight years merely as a reward for copying some revolutionary invention for which a competitor, or a foreigner even, might have been originally responsible. In the past century, industrial change and progress have come so fast that no sliding-scale system could have kept up, and we hope to see no slackening of our pace. Even in the relatively static field of public utilities, sliding scales may prove too rigid in some cases. The expert who recently reported on sliding scales to the Railroad (and public utility) Commission of Wisconsin⁸ concluded that conditions there were too dynamic to warrant following the example of Boston and the British municipalities in this respect.

* H. J. Thorkelson: Report on "Sliding Scale" Sept., 1911.

Another obvious limitation of the sliding-scale method is that it applies only to an absolute monopoly. For a pool every member of which earned a different rate of dividend, or for a typical trust including many plants, and with substantial competitors still surviving, this scheme would be absolutely unsuited, and some other way of stimulating progress must obviously be found. If the old competitive stimulus is to go, another must be provided, but how to do this is a question that no system of price regulation yet seen has fully answered.

II

So much for the unsettled problems in the business we are already regulating. In controlling trusts by the same method we should meet the same difficulties in intensified form. In only one important respect will the regulator of trusts have a decided advantage over the regulator of railways and public utilities. The question of preventing undue discrimination will take a far simpler form. On the other hand, as has just been shown, the stimulating of efficiency will be a harder task than ever. The task that will be likely to furnish the greatest immediate difficulty, however, is that regulation of qualities which must go hand in hand with regulation of prices, if the latter policy is not to be completely stultified.

In this respect the public service industries are much easier to handle than many lines of manufacture in which quality is so largely a matter of taste that scientific tests are of little use. It is easy to measure the voltage supplied to electric lights, or the illuminating power of gas, in definite figures, and even the promptness and safety of railway carriage can be tested by statistics, but what sort of yardstick shall we take to measure the fragrance, flavor, and drawing qualities of a trust-made cigar? Most industrial processes turn out a certain percentage of "seconds," or slightly inferior goods, which may or may not be sold with the firsts, and a company may evade a price regulation merely by increasing the percentage of seconds that is allowed to go out. We shall have a truly difficult task if we undertake to govern this practice in all its ramifications.

But aside from the old, familiar difficulties, the taking over of even a few trusts would raise some further troubles of a wholly novel sort. We have had some experience in limiting the earnings of industrial and commercial capital, but what shall we do

with those of agricultural land, and with royalties on mines and patents, when these come up for determination? Returns to land have been already controlled, in an incidental way, but never independently. The land has been valued on a basis of its other uses, a method which works well enough for the small areas needed in these cases but would be useless if applied to great areas of farm lands.

"But what has the control of trusts to do with agriculture?" may be asked. It has everything to do with it. Less than five years ago Kentucky swarmed with armed night riders, till life was not safe. And the cause? Resistance to the Tobacco Trust and the low prices it paid the tobacco growers, this resistance taking the shape of an attempt to organize a counter-monopoly. If we cannot allow night-riding, neither can we allow the oppression that causes it. We cannot fix prices of things trusts sell without fixing also the prices of things they buy, wherever they become monopolistic in their buying. We cannot let the trust evade regulation by merely shifting the burden one step back on to the producer of raw materials; we must fix these prices also.

The far-reaching effects of such a policy can hardly be exaggerated, nor its perplexities overestimated. The size of the crops is the most uncertain thing in our whole business life, and the yield of animal products only less so; and for that reason any price system that should be at all rigid would do the utmost damage. As it is, the high price in a year of shortage makes some amends to the farmer for his scanty yield, and *vice versa*. But if the price were kept steady, then in a year of plentiful yield the demand would fall short of the supply, and many farmers would be left with their crop on their hands, so that the last state of those men would be worse than the first. The trouble could only be avoided by a subsidy, or by forming a farmer's cartel so huge that none should be left out, and this would prove no easy task.

The regulation of forestry and mining would avoid this particular difficulty of extreme seasonal uncertainties, but would present many conflicting motives of its own. We are already torn between our desire to curb the earnings of suspected monopolies on the one hand, and the knowledge that low prices lead to wasteful methods of extraction on the other. The conservationist and the consumer have already come in conflict, and it is impossible to set up any very definite rule by which a regulating commission should settle the issue. One good thing the anthracite combination has

accomplished is to cut down the proportion of wasted coal from three tons in every five to a probable one ton in every three, both by saving the small sizes and by reducing the amount that is left underground beyond recovery.* The high prices of coal have undoubtedly contributed to make these savings financially profitable to the companies, and thus the consumer of today is being taxed for the benefit of posterity. It may be possible even to convince the consumer that he ought to make this public sacrifice, but it will be hard to convince him that the resulting public benefit is rightly the private perquisite of the owners of the coal mines. There is strong ground for believing that the conflict here revealed is irrepressible, and cannot be settled satisfactorily short of public ownership, and that it is to this result that regulation of mining profits would lead us.

Another hard nut to crack would be the treatment of patented processes wherever such patents make a substantial part of the monopoly power of the trust. These legal monopolies cannot be handled quite as boldly as the franchise privileges of public utility companies are, and greater liberality must be practised toward the holders. While a public utility franchise is a legal monopoly, it is properly granted with the reservation that charges must be reasonable. A patent, on the other hand, is subject to no such restriction. When we regulate the charges of a utility we are not encroaching on the franchise, for the right to regulate was implied in the terms of the franchise itself; but when we start to restrict the prices of manufacturers who enjoy patent rights we are in danger of striking legal snags. And there are few important industrial concerns without some patented processes among their assets. We cannot confiscate patents arbitrarily, and yet if patented processes make possible an industrial monopoly of the goods that are turned out, can government regulate the prices charged by that monopoly without diminishing the value of the patent privilege which itself has granted?

The solution of this question is a task for lawyers, not economists, but there is one point that can be grasped, even by the economic intellect. If we undertake to regulate prices we shall probably regulate them in the end, patents or no patents, but we shall have to make a change in the standing of patent rights quite as radical as any of the proposals that have been recently introduced in Congress to compel patentees, in certain circumstances, to grant

* Brief for U. S. in U. S. v. Reading Co. et al., pp. 124-131.

licenses for a "reasonable" royalty fee. If these current schemes for restoring competition are objected to because they involve tampering with patent rights, the scheme for price regulation is a pot of the same color, blackened at the same fire.

For all these reasons, then, we shall find our experience with public utilities will not fit the new requirements without many distinct alterations and some considerable additions. And if we were to adopt this policy because it seemed simple, we should be rudely disillusioned.

III

But the chief dilemma of all is still to come. So far it has been assumed that only a few trusts were made subject to price regulation. But if price regulation should become general and cover the whole field of trust industry, the very standards that now guide regulators would be taken away, for our conceptions of "reasonable" earnings are drawn from parallel industries that remain competitive. If we admit that the tendency to monopoly is the law of large-scale business and do not combat that tendency, we must lay our plans in the expectation that it will go on, and work out its logical results.

How much business will be left competitive and free of price regulation? We should have retailing, jobbing and repairing, some small-scale manufacturing, and especially businesses like printing and publishing and the making of novelties and specialties, in which the capital invested is relatively small and the personal equation relatively important. In agriculture we should have left only the raising of crops which are not sold to monopolies, such as truck and fruit-farming, the raising of hay, of draught animals, and in general of any produce which is in shape to be sold direct to the retailer. Even here farmers' coöperative selling bureaus may conceivably become so unified and powerful as to call for regulation. Such staples as wheat and corn may or may not keep their competitive outlets. Dairying is also a doubtful quantity, while the field of price regulation will be practically sure to absorb the raising of sugar, cotton, tobacco, and live stock for meat, hides, and wool.

If we fail, then, in the task of restoring competition and if the movement toward regulated monopoly goes on, we shall be confronted by a rather startling condition. The competitive field will have been narrowed to a minority of business, and that minor-

ity not even a representative one, for it will contain no businesses whose problems and risks are those of large fixed plants, nor any which use steam, electricity, and machinery on a vast scale. At present, in regulating monopolies we have the advantage of a huge competitive field from which to borrow our standards of efficiency, risk, and especially our standard of a reasonable rate of earnings. What shall we do when these standards are no more, when instead of a field of monopoly subsidiary to a system of general competition the case shall be reversed, and we have but a few fringes of competition entirely subordinate to a system based on regulated monopoly?

The mere size of the task of control might well appal us. Some hold that we can escape this difficulty, for they urge that, just as the Interstate Commerce Commission has been called on to fix but a small minority of the railroad rates of the country, so an Interstate Industrial Commission might find its task could be kept within small compass and so made relatively easy; that it need merely stand ready to fix prices on complaint; and that it could keep them in order by holding over the companies the threat of price fixing without being forced to any very general and active use of this big stick. But the evidence is much against such an optimistic forecast. The biggest example of this sort of regulation at present is the Interstate Commerce Commission. This body heard, in 1911, 881 formal complaints and over 4000 informal ones, or more than one formal complaint and five informal for every independent operating road in the country. If the average of dissatisfied customers ran as high for industrial trusts, it would not take many years at this rate to call in question substantially all the prices on their books. Moreover, even in railroad regulation the time is rapidly passing when control is a matter chiefly of single rates, and we are entering on more and more comprehensive hearings of whole schedules of charges, until in the cases already cited the Commission regulated at one blow the rates on which moved half the freight tonnage of the country. We cannot expect to evade the issue of price fixing, but must face it, even though it forces us to set a value and a rate of earnings on all the land, mines, and industrial capital of the nation.

But the most startling thing about this situation is that while laying on us the duty of regulating the prices and profits of most of our big business it would at the same time have taken away the very yardstick we now use to determine reasonable rates and

earnings in the regulating we now do. What is a reasonable rate of earnings? The most definite and immediate measure is furnished by the rate earned in competitive businesses that are more or less similar in general characteristics, and especially those that involve about equal risk. But when all businesses of a markedly capitalistic type shall be regulated, our very base line of regulation will thus have disappeared, and we must make our own standard of reasonable earnings. We must control the general level of business earnings, from which hangs the rate of interest itself.

The ultimate force which must limit all attempts at regulation is the necessity of attracting capital enough to develop our business opportunities to the full. The prevailing shortage of cars on our railroads is pointed to as evidence that we are reaching this limit in our regulation of freight rates, though the force of this argument is somewhat diminished by the fact that there also appears to be an undersupply of ocean going freight steamers at the same time. However this may be, one thing is sure, that if too strict a policy is followed in this country we must expect American capitalists to seek more and more foreign investments, while American business suffers the results of the exodus.

One method of judging might be through the market price of stocks and bonds. If these could be sold in the open market above par, assuming them unwatered, this might be taken as a guarantee that earnings had not been reduced beyond the limit set by a wise public policy. However, to study all the theoretical possibilities of the case would lead us too far afield. It is not the purpose of this paper to prove that general control of prices is possible or impossible, merely to point out how appallingly far-reaching, how deeply unsettling, such a policy would be, and this has been sufficiently indicated.

IV

All these difficulties will weigh not a feather with those who believe that large-scale competition is doomed, and who are writing premature obituaries while the patient is still on the operating table. But this patient has a strong constitution, and there are many remedies that have not yet been given full trial. If we reform patents, enforce a one-price system, prevent exclusive contracts and all other unfair and predatory practices, and encourage scientific cost accounting, we shall have made a good

beginning toward a cure; toward reestablishing sane and normal business **rivalry**.

Even under the plan of controlling prices some of these things must be done. The standing of patent rights must be revolutionized, and discriminations prevented. But the program of price fixing goes beyond these simpler remedies to other tasks that far overshadow them. The hardest task in restoring competition is to make dissolutions genuine. But the difficulties of price fixing are legion.

If we can succeed in restoring competition, the greatest need of all will be met, for industrial progress will take care of itself, without need of being bolstered up by sliding scales or other difficult administrative machinery. Rents and royalties and the general rate of property income can be left to the free play of supply and demand, to the vast relief of those on whom might fall the task of controlling these shares of the nation's income.

If the policy of restoring competition fails, and we must admit the possibility that it might fail in some cases, we have still the more direct method of control to fall back on. But if we place our reliance on regulation of prices at once, and permit combinations, and then find ourselves disappointed in the results, it may prove to be too late to return to a competitive condition. The alternative then before us will be public ownership, and a long stride in the direction of state socialism. Is it not the wiser and in the long run the easier course to keep the regulation of prices as a last resort, with a firm determination that the occasions of its use shall be few and far between?

THE ECONOMICS OF GOVERNMENTAL PRICE REGULATION

SOME OBJECTIONS CONSIDERED

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In these days the suggestion that the government regulate prices does not arouse the apprehension that it would have fifty years ago. Today governmental price regulation is not a theoretical proposition but an accomplished fact. In an extensive field of industrial activity we are already engaged in fixing prices. The results, moreover, have not involved the disasters once prophesied, and now the question is not whether price regulation should be abolished, but whether it should be further extended so as to include the so-called industrial trusts. The great advantages of such a proposition in doing away with the evil of monopoly price and furthering a better distribution of wealth, are, I believe, generally admitted. The chief opposition thus far developed seems to be based on the argument that there are weighty objections to the measure which more than counterbalance its advantages. This morning, therefore, I shall confine myself simply to a consideration of these objections.

The seriousness and the difficult character of the task of price regulation are admitted at the start. Undoubtedly this is a measure that should not be resorted to until other less radical devices have proved inadequate. Therefore I am heartily in accord with those who say that in the case of the industrial trusts we should first do away with all forms of special privilege and unfair methods of competition. Moreover, I believe that in the vast proportion of cases this would be sufficient to curb all dangers of monopoly. Thereby, however, one of the chief objections to governmental price regulation is at once removed. There would be no such countless number of cases requiring the control of prices as has frequently been pictured, and the task of regulation would be vastly simplified. In fact there are some who claim that such measures would prove adequate to curb every trust and consequently there would be no need for price regulation at all. With this view I am unable to agree, for I believe that there are at least two classes of trusts that would still survive. First, there

are those whose strength is based on control of some natural resource, for I fail to see how the reforms suggested can hope to regulate the trusts so fortified. Second, there are those trusts where the monopoly form of organization is superior either in productive efficiency or in social value. I would emphasize the latter because it is a frequent mistake to judge the desirability of a trust solely on the basis of its productive efficiency. As yet our information is hardly sufficient to enable us to determine what this class would include. It should be borne in mind, however, that so far as the most fundamental economic characteristics are concerned it is impossible to draw any hard and fast line between public callings where monopoly has been admitted to be desirable and the industrial trusts. Not only do they blend imperceptibly into one another, but the whole trend of industrial development is in the direction of higher organization and centralization. Who will say that even now the distribution of milk or ice could not be carried on with greater productive efficiency and social value under a properly regulated monopoly than under the system of competition? The number of trusts which might come under this second class would doubtless prove to be small, but this only emphasizes the point previously made that the task of price regulation is much less of a burden than many proclaim, and that the objection based on the mere magnitude of the task is groundless.

Another objection to governmental price regulation, doubtless the most fundamental of all, is that it will tend to check individual initiative and progress. In this connection I would first raise the question whether rapidity of growth is more to be desired than soundness of growth. We all know that the most rapidly growing youth is not in the long run the most healthy. The effects of the American mania for speed at all costs are well illustrated in the industrial history of this country; we have stimulated development in innumerable ways from the first but we are now beginning to realize, to our cost, that the results are not always the most desirable. However, the other extreme of no progress would be far worse, and it must be admitted that this objection is based on very fundamental principles and deserves most thoughtful consideration. But in discussing this objection one point is generally overlooked. It should be noted that if an industry has reached the stage of monopoly then the stimulus of active competition, which is an important incentive to individual initiative and the chief force working to transfer the benefits of progress to the general

public, has already been removed whether we resort to price regulation or not. Under these circumstances a properly devised plan of price regulation becomes the best means of transmitting these benefits to the people, and furthermore it may actually prove an incentive to individual initiative as well. Much depends upon the methods used.

The first essential is to make sure that the trust is given a chance to make a reasonable profit. Just what that is, only experience and a careful study of each case will determine. All we can say is that it must be high enough to induce people to remain in the industry, or to put new capital into it if there is room for expansion. In fixing prices it will be desirable to err on the side of generosity to the trust. Not only that, but care must be taken to provide some definite and reasonable stimulus to individual initiative and progress. Increased profits arising either from improvements in technical processes or from better organization and business methods must not be snatched away at once by compelling a corresponding reduction in price. It should be a definite policy to permit a concern to keep a portion, if not all, of the extra profits arising from such improvements for a period of time, though in the long run the gain must be transmitted to the consumer through a reduction in price. The extra margin of profit obtained in the meantime will be a sufficient inducement to secure progress. This is shown by the fact that our present attempts at price regulation work out in substantially this same way. There is no attempt at an exact adjustment of prices and the profits from improvements accrue in the main to the producer. Moreover, our actual experience in the cases of railroads, gas, electric light, and similar concerns does not indicate that the incentives for progress have been removed by price regulation. Surely there is no serious general demand that we abandon our present practice for the sake of securing more rapid progress in these industries. Nor does this experience show any ground for the fear that capital will fly the field of industry where prices are regulated. It probably does keep out purely speculative capital, but sound business enterprise has not been scared away. In fact there is a conceivable danger on the other side. The plan must not be made too attractive to promoters and monopolists. There can be no guarantee of fair profits, simply an opportunity open to anybody with average management. If the trust is inefficient the field is free to others, and it should be noted that in the case of industrials the monopoly is

much more open to attack and so will ordinarily have a greater incentive for efficiency than most public service companies.

As a working scheme, probably the most effective method to secure both efficiency and reasonable prices is that whereby a standard price and rate of profit is determined upon, a reserve fund created, and then for every decrease in price of a given amount an increase in profits is allowed to the owners, the standard being revised periodically; such, for instance, as is used in the case of the Boston Gas Company. Given the existence of monopoly, I am firmly convinced that such a scheme actually offers an even greater incentive for improvement than no price regulation. This plan, however, requires a very careful adjustment in the first place, and probably is not adaptable to many lines of industry. A more elastic and usable scheme would be to fix a maximum price, one somewhat above what might be expected to be the average price yielding a fair profit, and then tax progressively all profits above a given rate, proper allowances being made for the accumulation of a reserve. The suggestion that taxation of profits alone be used is not discussed because, in spite of avoiding the difficulty of price fixing, it has two fundamental defects in failing to afford incentive for progress and in not adequately meeting the crucial evil of distribution.

Another objection raised is that the price regulation will be too difficult and intricate a problem for a government commission. Of course this ignores the fact that we are already working out just this problem in the case of the public service companies, where the results, if not perfect, certainly are not a failure. But would it be more difficult in the case of the industrials? In some instances it would be easier. Thus there are few commodities where there is less to guide one and where the costs of production can not be far more definitely determined than in the case of a railroad rate. Admittedly, however, fixing the price of commodities will involve more difficulties than now arise in connection with gas, electric light or street railway companies. Doubtless more would depend upon the decision made in the case of an important commodity than in that of a single railroad rate, but the number of decisions would be smaller in the case of industrials and the importance of some general rate decisions is quite as great as that which might be involved in almost any commodity. Another advantage of industrials is that by affording freer opportunity for potential competition they would require less control over quality of the service.

On the other hand, there are certain respects in which price regulation of industrials will be more difficult than in the case of public service companies. Even with the increased stability that may be expected to come from monopoly, the industrials are subject to more frequent fluctuations in prices. But, if the government simply fixes a maximum price, above what may be expected to be the average, then there is room for fluctuations to meet the varying conditions of trade, and there will be no necessity for the government's determining every change. Nevertheless, it must be admitted that revision of the maximum price will have to be made more frequently than in the case of public service companies.

Another difficulty arises in making sure that the adjustment of prices is based on the costs under reasonably efficient management. In the case of public utilities, such as gas, street railway or electric light companies, the business is becoming standardized and the monopoly is localized so we can compare the efficiency of different concerns and have some basis for testing the management. But an industrial monopoly is likely to combine nearly all the plants producing the commodity under one management. These plants will vary among themselves and thus afford some basis for comparison, but special care will have to be taken to make sure that inefficient management is not accepted as a basis for price regulation. This difficulty, however, is in a considerable measure offset by the fact that, unlike the public service companies, few industrials have a complete monopoly; there are generally some independent concerns and there is always greater opportunity for new competition to develop in these industries, all of which features afford an important check on inefficiency, and one such as is seldom available in the case of the public service companies.

Still another objection frequently given great weight is that if we begin to regulate the price of a commodity it will eventually involve regulating the wages of the labor employed. Since the value of the agents of production is derived from the value of the finished products, it might appear that fixing the price of the product would determine the value of the labor employed in producing it. If a given class of labor could be used only for one product this would be true. In fact, however, the demand for most of this labor comes from many sources; it is a composite demand, and that arising from any one commodity is a negligible factor. We can not deny any influence, but, practically, it is so slight that it can be ignored. The prices fixed in the general

market afforded by the many other sources of demand offer a sufficient basis on which to proceed in fixing prices. Experience, moreover, justifies this conclusion. In the case of public service companies wages have fluctuated up and down when there were no changes in rates, but any distinct and fairly permanent change in the market price of labor is recognized in fixing rates. This objection, therefore, is one which need not make us hesitate in resorting to price regulation.

So far, then, as this hasty review of some of the chief objections raised against governmental price regulation in the case of industrial trusts covers the question, I conclude that since our present experience in the regulation of public service companies has met with reasonable success, there being no indication that it is likely to be abandoned; and since there is no reason for believing the problem would be much more difficult in the case of the few industrial trusts where other remedies are inadequate,—therefore we are not justified in condemning governmental price regulation on the basis of these objections.

Finally, it must not be forgotten that the evil we are attempting to remedy involves one of the most serious economic problems of the day. While I have confined myself to an attempt to show that the objections to governmental price regulation in the case of industrial trusts are not much more serious than in other cases where the same policy is admitted to be desirable, it does not follow that price regulation is to be condemned, even if one is not convinced of the soundness of my position. In such problems there is no remedy which does not involve some difficulties, and it is always a question of balancing the objections and advantages on both sides. Thus in this case, where the existing evil is so very grave, a measure which promises to control it may still be well justified even though the existence of great difficulties were universally conceded.

THE ECONOMICS OF GOVERNMENTAL PRICE REGULATION—DISCUSSION

F. W. TAUSSIG: As a matter of economic theory, the doubtful point in any endeavor to fix fair prices is in business profits. It is possible to determine with sufficient accuracy what are fair wages (including salaries), and what is a fair return to capital. But any precise determination of business profits for great enterprises is extremely difficult to reach. How much should we allow for enterprise, risk taking, unusual skill in management? Our whole theory of business profits is somewhat nebulous; no doubt of necessity so. Every one knows that fortunes are made in industries strictly competitive, and are to be ascribed to unusual business capacity. Under the régime of private property, great rewards of this sort may be assumed to be just. When a monopoly or quasi-monopoly secures high returns, how are we to separate the part attributable to monopoly from the part attributable to excellence in management?

None the less, this difficulty is not necessarily insuperable in an endeavor at price regulation. After all, only rough and approximate results are to be expected. The problems would be not unlike those of physical valuation. No two experts will agree on the physical valuation of a given property, or on the sum for which a fair return should be allowed. But experts' reports will make it clear whether capitalization is grossly in excess of physical valuation, and grossly in excess of the sum on which a return should be earned. So as to price regulation: it may often be impossible to say what is a fair price, but none the less possible to say that a given price is in excess of any rate conceivably fair.

Two things seem to me clear as regards the present state of the combination problem. In the first place, we are not certain how far combination conduces to effectiveness; hence not certain whether the drift toward it is inevitable. We shall get our best evidence on the subject if we succeed in putting an end to browbeating and bullying. All the devices which a great concern can use for getting rid of a competitor, should be prohibited; such as intentional price cutting, bogus competitors, spying, and the various mean and underhanded doings uncovered by recent prosecutions. Let us hope that legislation can secure this much, and leave the field open for real competition. Then we may have some

comparison between the industrial effectiveness of a huge concern and its smaller rival.

In the second place, we need what I may call a "round-up." We need a registration of all the large concerns, and more routine information about them than we have now. The powers of supervision of the Bureau of Corporations should be enlarged. All "industrials" should make regular reports to it, perhaps similar to those which the railways make to the Interstate Commerce Commission; and the Bureau should have authority to check those reports, and to examine all books and records. The time may come when the Bureau should be given much greater powers. All agree that a task of price regulation would be in the highest degree difficult. Before we go so far as this, let us see what can be done toward making competition effective, and toward ascertaining how competition really works.

ELIOT JONES: The foregoing papers, it would seem, suggest the need of distinguishing between different kinds of monopolies. In some lines of industry monopoly control has been built up by means of some form of special privilege, such as rebates. In many cases the formation of the monopoly has been promoted through a tariff, which shuts out foreign competition, while patents (especially with the exclusive contract feature) have operated to exclude domestic competition. Local price discrimination, also, has been a factor in the development of monopolies, and the possibility of such discrimination has tended to prevent potential competition from becoming effective competition. A removal of these special favors, which made possible the development of the monopoly, may possibly lead to its disintegration and the restoration of competitive conditions. Whether or no this would be the result, as is suggested by Professor Clark, would presumably depend upon the relative efficiency of the trust form of organization as compared with other types of business organization, but the eventual breakdown of monopoly control is at least a possible outcome.

But with respect to those monopolies based upon the control of natural resources, the problem is somewhat different. The anthracite coal combination, though it presents certain peculiar features of its own, well illustrates the complexities of the situation. Neither a protective tariff nor the control of important patents have been factors in the elimination of competition; and though

railroad rebates have served to discourage independent operation, they do not alone account for the development of the monopoly. And keeping in mind the nature of the anthracite combination, one could hardly claim that the development of this combination is explained or justified by the superior economics of the trust form of organization. The strength of the anthracite coal combination lies in the ownership or practical control by a few railroads, either directly or through subsidiary coal companies, of substantially the entire supply of anthracite. One company alone (the Reading Company) owns or controls about two thirds of these anthracite deposits.

An attempt has been made to effect the dissolution of this combination through the enforcement of the commodity clause of the Hepburn Act, which made it unlawful for a railroad company to transport in interstate commerce commodities mined by it, or under its authority, or in which it may have any interest, direct or indirect. The Supreme Court, however, held that this clause did not preclude a railroad company from transporting commodities mined by a *bona fide* coal mining company, even though the stock of this coal company was owned by the railroad. Inasmuch as this was the typical method whereby the railroads controlled the anthracite business, this decision effected little disturbance of the conditions existing prior to the enactment of the law.

Yet, even should further legislation be invoked to include within the prohibitions of the commodity clause the ownership of the stock of a coal mining company, there is little ground for believing that competitive conditions would be restored. The probable result, should the coal companies be separated from their present railroad control, would be the organization of a coal trust or at least some form of agreement among the coal companies to regulate output or fix prices. This would be rendered comparatively easy of attainment because the limited supply of anthracite coal is concentrated within a few hands.

How then is this situation to be dealt with? It would be in accord with the suggestions made by Professor Wright to regulate through some public authority the price which may be charged for coal. Though this plan might well be successfully carried out, nevertheless, I would suggest the query as to whether the problem would not be simplified by means of public ownership of the anthracite coal mines. The lands could then be leased under conditions prescribed by the government. The enforcement of the commodity

clause could be secured through the refusal of the government to lease coal lands to any company, such as a railroad company, whose duty to the public might be affected thereby. Were it desired to prevent the formation of a trust, the lease could be revoked whenever the lessee entered into a combination. In case subsequent experience demonstrated that the leasing system did not provide altogether adequate safeguards for the public in respect to the price charged for coal, it would still be possible to resort to a scheme of price regulation under government ownership and with a better chance of success.

JOHN H. GRAY: A more fundamental question than any yet discussed is, whether, or not, with our large business units and concentrated organized groups, under one name or another, we have a governmental organization capable of dealing with this degree of concentration even without price fixing. No government can long endure if any of its citizens, subjects, or organized groups of citizens conscious of a common purpose, is stronger than the government itself. The relative position of the government and concentrated business in this connection must be changed. The question of the expense of regulating prices does not touch the real problem. We must develop a more powerful, more learned, more permanent, and much more expensive government, if we are to maintain our civilization at all, and enable it to perform those functions which are universally admitted to be proper governmental functions.

An important question is whether or not the large trust for any reason is more efficient than the smaller business unit. Perhaps no phase of this subject has evoked more fallacies than that of the relative efficiency of the large trust, but in the last ten years we have come to realize that these efficiencies of organization and operation, while they may exist, are of less significance than certain elements which heretofore have received an inadequate consideration. The monopolistic power of such organizations to control the market and secure higher than competitive prices, has been more important than the increased efficiency coming from combination. However, whether due to efficiency or monopoly, or both, the concentration of industry is here to stay, and our problem is not to try to compel competition or prevent monopoly but rather to control the monopoly.

If we ask on what the monopolistic tendency rests it is hard to classify all, or even the more important, elements which tend to

give one organization,—the earlier, the shrewder, the larger one,—a real advantage in the market. It may be a single best route for a railroad, or an advantageous position for a terminal. Sometimes the mere magnitude of capital makes the fight too uncertain in its outcome to justify men in undertaking it. The more one studies into the situation, the more he feels that for these and other reasons the first great combination to acquire a foothold in a given field has an enormous strategic advantage. Take the Steel Company: In the face of the opposition of that company nobody can get together a large enough capital to compete permanently with it. If a new company could get the capital, it could not get as good ore in as great quantities, as good positions for its railroads, its wharves, its docks, and so on. In other words, the fight would be an unequal one and the newcomer would fight at a positive economic disadvantage. That is, to force attempts at competition would be exactly like forcing permanently the maintenance of an industry which in fact is at a disadvantage by means of a protective tariff. The meaning of this is plain—namely, that while there are many methods of immoral and unjust competition, all of which, so far as possible, ought to be suppressed by the government, the fact still remains that, through the limitation of the best natural resources and the best locations for specific industries and other reasons, the first large aggregation in the field has a real advantage, and by just means, therefore, can, in a fair fight, drive its competitor out of business. From this it follows that we might, cut some of the profits of the trust by destroying unfair methods of competition, but we could not maintain the competitor. The circumstances do not permit a fight on equal terms, which means that we are permanently in an age of trusts and monopolies, and that there is no way to get out of this difficulty, unless we are willing to destroy our fixed capital and lower our civilization to the plane of the days of hand labor. As that is unthinkable, the only other remedy is to recognize monopoly and control it in the public interest, and not to attempt to maintain a competition which cannot be maintained except at the expense of the consumer.

The only justification for attempting competition in such instances is that we have not sufficient control over the trusts, and use the competing company merely as a club to make the trust be decent and serve the public at proper prices.

I end where I began—we cannot abolish the trust and maintain our present scale of life. We cannot, in fact, maintain competi-

tion. If we could, that would lower the possible scale of life. We cannot in the face of increasing concentration of industry maintain any civilization at all unless we have a government strong enough, in fact, to control the trust. The questions of unfair competition and of the expense of government fixing of prices are entirely secondary and really irrelevant questions. The government must control the trusts, no matter how expensive, or the trusts will do the government away or use it for selfish ends.

O. M. W. SPRAGUE: The advantages of monopoly over competition in the case of the local public services are generally recognized. That there are similar advantages in the production of commodities is, to say the least, still to be proved by experience. Upon this matter, reasoning from analogy cannot be relied upon. A public service corporation has merely a local monopoly; there are numerous companies engaged in furnishing each kind of public service. Gas companies, for example, in many places may be managed unprogressively, but in many other places the business is certain to be in efficient hands. There is no danger, therefore, that continued improvement in practice and organization will not be made. A few commodities also, such as ice and milk, must be produced locally, but in most industries concentration of production is possible and if a monopoly is established the industry as a whole comes under a single management. Then if the management becomes inefficient, improvement may be checked for an indefinite period.

Of course, potential competition is in a measure a safeguard here. But we can not be sure of its effectiveness, even with unfair methods of competition eliminated, because of an obstacle which seems to have been overlooked by previous speakers. The industries in which a monopoly has been or is likely to be established are those requiring large capital, and expensive marketing organization, or those in which the control of raw materials can be secured. To engage in effective competition in such industries requires a large capital expenditure and the provision of facilities for the production of commodities which, together with those of the monopoly, are pretty certain to be far in excess of profitable demand. Securities issued against the business of the monopoly will commonly have been marketed widely among investors through banking houses. When the would-be competitor resorts to them for financial assistance, he is hardly likely to receive a favorable

response. It is not necessarily the desire for inordinate monopoly profits that leads the banker to look askance upon the proposal. The reputation of the investment banker rests largely upon the course of the securities which he has already marketed. He can hardly be expected to foster new issues which are quite likely to prove of uncertain worth themselves and also weaken the standing of those which he has already placed among investors.

The shipping business provides a good example. The addition of a new line of steamships on any of the great ocean routes would so enormously increase cargo and passenger capacity as to create a condition of oversupply which would probably last for years. The securities of the new line would necessarily be highly speculative in character, and the establishment of the line would also make distinctly more speculative than at present the securities of existing companies. The refusal of investment bankers to finance new steamship companies is perfectly natural and yet this unwillingness has recently been made the basis for much unintelligent criticism.

Potential competition is effective when it can be made actual without adding largely to existing facilities for production. Its potency lessens as the size of the business organization increases. Until we know, therefore, that continuous improvement will be made under monopoly conditions, the path of monopoly should not be made easy. The bed of the monopolist should be made uncomfortable rather than attractive, so that only where the advantages from monopoly are overwhelming will it be established.

T. N. CARVER: Is it not possible that the reason why the Wisconsin Commission think that it would be easier to run the railroads than to regulate railroad rates is because they have tried the latter? I am that way myself. If I am making an indifferent success in my present job, I naturally think that I would be a great success at some other job.

There seem to me to be some constructive possibilities in Professor Gray's suggestion to appeal to vanity instead of greed. The German civil servant's pride in his uniform certainly does secure efficient work. I think I should not suggest the complete substitution of vanity for greed as a motive to which to appeal, for I think on the whole vanity is a lower motive even than greed; but if we can appeal to both vanity and greed we shall then have a double incentive to strenuous action instead of a single incentive.

Another suggestion along the same line is that of playing the vote getter against the money getter in the universal struggle for self-interest. Apropos of Professor Sprague's remarks about the bankers' control of new investments, such as a new steamship company, and Professor Commons's comment to the effect that it was the "money trust" rather than the people who determine such things, I would suggest that Professor Commons's comment does not quite touch the point. The real question is whether the money getter or the vote getter shall determine such questions. When it is left to the money getter, he tries to feel the public pulse, or to get a knowledge of the desires of the people, quite as truly as does the vote getter, but he applies a different test. If he thinks the people want a new enterprise—say a steamship line—enough to pay for its services in large enough quantities to more than pay the cost of the enterprise, he is naturally quite willing to see the enterprise started. If it is left to the government—which means the elected officers of government, they also try to find out what the people want, but their test is somewhat different. If they find the people want a thing enough to vote for it, or to vote for those representatives who favor it, then they will start the enterprise.

Let us be under no delusion here as to what government is. The people do not control the enterprise under government any more than they do under private ownership. Under private ownership their control is exercised by their unwillingness to pay for the service in sufficient quantities to pay the cost of service. Under government enterprise their control is exercised by the ballot. It is simply a question, therefore, as to which is the more accurate method of expressing approval or disapproval. Suppose in the case of the steamship company the people were unwilling to pay for the service in sufficient numbers to pay the cost of service,—naturally the money getters, if they foresaw that situation, would not start the enterprise. Suppose, however, the voters were willing to vote in favor of the enterprise, or of the public official who would start it, or vote against the public official who would oppose it,—in that case the enterprise would be started any way. We have, therefore, to ask the question: Is the money getter's test as to whether the people want a thing as accurate and satisfactory on the whole as the vote getter's test? The money getter's test is the willingness of the people to pay. The vote getter's test is the willingness to vote for the enterprise. If we look at the matter fairly and squarely in this light, and do not try to obscure the issue

by applying a bad name to one method and a good name to the other, we shall be in a position to decide these matters wisely.

However, it seems that we cannot trust implicitly to either the money getter or the vote getter in these matters, but must play one against the other, and in the tug of war between the two the rest of us plain people may manage to get what we want. Where the money getter is in direct competition with other money getters, they will exercise a pretty effective check or control upon his rapacity. Where a monopoly exists, so that there is no such direct competition, and therefore no such effective check or control, some other check must be found. The only available check is found in the presence of the vote getter, who will undertake to fix prices by legislation where competition has failed to fix them. In other words, government control of prices is the control exercised by the vote getters, because government in a democracy is a government of vote getters. This method of playing the vote getter against the money getter is, frankly, an awkward method, but it is the best there is.

W. Z. RIPLEY: Much of the discussion concerning monopoly thus far seems to imply that any attempt at regulation, either by state or federal authority, will strike at all manifestations of it alike. I conceive, however, that the first experiment in the line of price regulation will be found to occur on a modest scale in connection with some peculiarly obnoxious local monopoly. Public spirit will be aroused over the control of some indispensable product essential to the public health, such as, for example, a monopoly of the supply of milk, ice, or coal. Whether all the constitutional objections to price regulation can be overcome on the ground of public health and necessity, as an exercise of the police power, remains to be seen. But that we shall engage in such an experimentation by means of general legislation, such as the railroad rate bills, seems unlikely. The utterances of the Attorney-general of New York state in connection with the discovery of a water-tight monopoly of the milk supply, broadly suggesting the likelihood of price regulation by law, is one of the most significant signs of the times.

FRANCIS E. STANLEY: My object in joining the Association was to enable me to associate with men who were considering and trying to solve social problems by scientific methods, and, judging

from the papers which have been read and the remarks which have been made during the several meetings, I am somewhat disappointed, inasmuch as there is an apparent lack of the scientific method and scientific spirit in the treatment of the various subjects, this being especially noticeable in the discussion of the subject of the minimum wage and rate regulation.

It is my understanding of a method that could be called scientific that the first step to be taken is to establish fundamental principles, and that in the discussion of the minimum wage question and the question of regulation of prices some of the principles which may be regarded as fundamental and axiomatic were ignored, for example, the principle of justice.

In the administration of government, the idea of justice should take precedence over that of beneficence, and in the establishment of any law, system, or custom which has to do with the regulation of the activities of the citizen, the first question to be asked is: Does the law, the rule, or the method harmonize with that principle of equal freedom which we call justice? We must bear constantly in mind the fact that the distribution of wealth, if just, must necessarily be unequal, and any law, custom, or system of production and distribution that makes it as profitable to be ignorant, incapable, and lazy as to be intelligent, industrious, and efficient, is directly opposed to progress and the reaching of a higher civilization.

Most of the evils of society and the sufferings of humanity are not the result of injustice, but are the unavoidable consequences of our imperfect natures, and the remedy is in better men and better women. To quote from David Starr Jordan, "We cannot expect society to be much better than it is now, so long as it is composed of such people as you and I."

The first lesson for the social reformer to learn is that to discover the cause of an evil is of first importance, and that great and permanent reforms never come quickly, do not depend upon any one man or any set of officials, and that social evils cannot be cured by legislative specifics.

It is the duty of the Economic Association to discover those fundamental principles with which all laws must conform. When people are intelligent enough to govern themselves, they must be intelligent enough to formulate those principles in accordance with which they will consent to be governed; and if they are not sufficiently intelligent for that, and are not able to construct constitutions and laws in harmony with such principles, they are not

sufficiently intelligent to govern themselves. We must first invent or discover the rules of the game before we can play the game. Since it is true that the principle of justice must take precedence over that of beneficence in the construction and enforcement of the laws of a nation, it is the duty of this Association to look first to remedying those evils and relieving that suffering which results from injustice. That idea of justice which will come nearer to being universally accepted than any other, would be defined as follows: Justice is the securing to each the results of his activities, and the requiring of those activities to be carried on within the circumscribed limit which equal freedom imposes. It is the legitimate function of government to enforce the principle of equal freedom, and to prevent each citizen from encroaching upon the rightful domain of his fellow citizens. But when, in accordance with the laws and customs of the nation, the activities are so limited, then within that circumscribed limit the superior are entitled to the rewards of superiority, and the inferior must suffer the penalties which inferiority entails.

So-called rate regulation should be confined to those industries which could not be established and would not be carried on without an infringement upon the principles of justice. The right of eminent domain rests in the hands of the state or nation. At any time and in any place, when the welfare of society demands it, private property may be taken and devoted to public use; but when the state, by the exercise of that right, takes private property and turns it over to a corporation to exploit for its own benefit, an injustice is done that cannot be rectified by any system of governmental rate regulation or federal control of so-called big business.

All industries, such as transportation companies, street railways, supplying towns with water, gas, or electricity, or any industries which cannot be carried on without public franchise involving the right of eminent domain, are justly subject to the absolute control of the power that grants the franchise. Hence, the right to control depends not upon the fact that the business is big, but upon the fact that it could not be established, or would not be carried on, without a violation of the principles of justice.

Any law which confers upon corporations or individuals special privilege conflicts with that fundamental principle of justice which is the corner stone of a democracy, no matter whether the privilege benefits the capable or the incapable, the rich or the poor. Equal rights to all and special privileges to none is the central thought of democracy.

BUSINESS MEETINGS AT BOSTON.

DECEMBER 27 TO 31, 1912.

As announced in the program, a meeting of the Executive Committee was held on Friday, December 27, at 3 p. m., in Room B, the Copley Plaza. There were present President Fetter, and Messrs. Adams, Patten, Taussig, Hollander, Commons, Barnett, Farnam and Carver.

After the reading of the minutes of the last meeting, the Secretary-Treasurer presented the facts regarding the increase of membership and the financial condition of the Association. No votes were passed.

A business meeting of the Association was held at Room 22, the Walker Building, Massachusetts Institute of Technology, on Saturday, December 28, at 9 a. m.

On motion, it was voted to dispense with the reading of the minutes of the last annual meeting, they having been already published in the *Proceedings*.

The report of the Secretary for 1912 was then presented, as follows:

REPORT OF THE SECRETARY TO THE AMERICAN ECONOMIC ASSOCIATION

FOR THE YEAR ENDING DECEMBER 20, 1912.

Since the last annual meeting there has been held but one meeting of the Executive Committee of the Association. This was held on February 16, 1912, at 10 a. m., at the Technology Club, Gramercy Park, New York City. There were present President Fetter and Messrs. Patten, Hollander, Barnett, Seligman, Dewey, McCrea, Babson, and Carver.

On motion, it was voted that the special finance committee authorized at the last meeting of the Executive Committee be constituted at once.

On motion, it was voted that the list of publications of the Association be published with each number of the *American Economic Review*, in such form as the Secretary and the Editor may decide.

On motion, it was voted that the arrangements for the next annual meeting be referred to the President and Secretary, with power to act.

On motion, it was voted that hereafter no resolution be passed at any public session of the Association.

The organization of the special finance committee referred to was never carried out, because, owing to two fortunate events, it seemed probable that the Association would be able to meet all its expenses for the year. In the first place, ten new life members were added and fourteen old life members made an additional contribution of \$50 each, mainly through the efforts of a special committee of the life members. In the second place, a contribution of \$1000 was received for the purpose of extending the work and influence of the Association. It has turned out that the funds thus obtained, together with the receipts, have a little more than covered the deficit for the year.

Since the last report of the Secretary, the following changes in the list of members and subscribers have taken place:

New members added.....	495
New subscribers added.....	45
 Total additions	 540
 Old members resigned.....	 170
Removed for lack of address.....	12
Dropped for non-payment of dues.....	29
Deaths	18
Subscriptions discontinued.....	10
 Total subtractions.....	 229
 Net gain	 311
Members and subscribers Dec. 20, 1911 ..	2404
 Total " " " Dec. 20, 1912..	 2715

Of the new members added during the year 10 are life members. Of the total membership 84 are life members and 9 are honorary members.

The unusual number of withdrawals is to be accounted for as follows: first, our larger membership would normally result in a

larger total annual loss, though the percentage need be no larger; second, the anticipation of the rise in the membership dues, regarding which notice was given to each member at the beginning of the present year, has very probably accelerated the rate of withdrawal; third, the enlargement of the membership has probably brought in a class of members whose interest in the purposes of the Association is somewhat less intense than that of the smaller membership of earlier years. The rate of withdrawal of these less interested members would naturally be somewhat higher than that of the older membership. The losses in membership from causes other than death during the last five years are as follows:

Year	Membership at beginning of year	Losses, excluding deaths	Percentage
1908	1040	32	3.1
1909	1002	37(?)	3.6
1910	1360	48	3.5
1911	1702	91	5.3
1912	2404	211	8.7

At the last annual meeting it was voted, among other measures of economy, to ask the Secretary to reduce the expenses of his office by \$500. This would have necessitated reduced activity in the work of increasing the membership of the Association. During the first few months of the year this curtailment was carried out, but fortunately the special contribution referred to above was received in May, since which time the Secretary's office has increased its activity in that direction as far as seemed consistent with the character and policy of the Association.

Not only has the loss of membership been somewhat larger than in previous years, but the new members added are somewhat fewer than last year, making the net increase only 311 as compared with 702 last year. The reasons for this are probably,—first, the reduced activity of the Secretary's office during the first five months of the year; second, the increase in the membership dues, notice being given in every case that the dues were to be \$5 after January 1, 1913. However, the fact that there has been a fair increase in membership in spite of these obstacles may be taken as ground for congratulation.

The *Proceedings* of the annual meeting were published in greatly compressed form as compared with preceding years, and the publication of the *Handbook* was omitted altogether. It is a

question for the Association to decide what policy it shall follow toward these two publications during the coming year.

Another matter of general policy, which must be decided sooner or later by the Association as a whole, is that of being officially represented at gatherings of a scientific or practical character. During the past year the Secretary has, either on his own responsibility or in consultation with the President, responded to four invitations of this kind. Professor J. T. Holdsworth was asked to represent the Association at the 125th Anniversary of the University of Pittsburgh; Professor E. T. Miller to represent it at the opening of the Rice Institute, Houston, Texas; Hon. Edward C. Simpson and Professors Charles A. Tuttle, U. G. Weatherly, and James G. Weaver were asked to represent us at the National Conservation Congress; and Dr. C. W. Macfarlane and Professor W. G. Langworthy Taylor at the celebration of the Société d'Economie Politique in honor of the 90th birthday of M. Passy, its former president and oldest then living member. In all cases the representation was without expense to the Association and the representatives were informed that they had no power to commit the Association to any vote.

Invitations have been received from the Indianapolis Chamber of Commerce and from the New Orleans Conventions and Tourist Bureau to hold the next annual meeting in their respective cities. Invitations to meet in Minneapolis in 1913 have also been received from the University of Minnesota, through its President George E. Vincent, from the Governor of Minnesota, from the Mayor of Minneapolis, and from the Minnesota Historical Society.

It is the Secretary's sad duty to record the loss of the following members by death during the year 1912:

W. W. Adams
John Jacob Astor
J. J. Browne
Frederick M. Burgess
Elizabeth B. Butler
Edgar S. Dowe
Louis R. Ehrich
J. R. Flickinger
Ernest L. Hammargren

John F. Hinckley
Frederick W. Moore
Godfrey Morse
Henry Phillips
Harrison S. Smalley
Robert M. Stratton
Isador Straus
Charles N. Vollum
Carola Woerrishoffer

Respectfully submitted,
T. N. CARVER, Secretary.

On motion, the Secretary's report was accepted to be placed on file.

The annual report of the Treasurer was then read, as follows:

REPORT OF THE TREASURER TO THE AMERICAN ECONOMIC
ASSOCIATION

FOR THE YEAR ENDING DECEMBER 20, 1912.

The books of the Treasurer show his accounts to stand as in the following table. The details in the form of a Balance Sheet, Income and Outgo Account, and Surplus Account are given in the report of the Auditing Committee.

CASH RECEIPTS

Cash Balance, December 20, 1911.....	\$ 390.03
Membership Dues, collected in 1912.....	5878.64
Life Memberships	1700.00
Subscriptions paid in 1912.....	976.33
Sales of Publications, collected in 1912.....	675.39
Guarantee Fund, payments in 1912.....	2335.54
Interest	57.74
Prepaid Dues for 1913.....	637.31
Luncheon Subscriptions received.....	180.00
Extension Fund received.....	1000.00
	<hr/>
	\$13830.98

CASH PAYMENTS

Publication expense paid.....	\$ 7629.07
Office expense paid.....	2004.53
Bills of 1911 paid.....	1003.60
Notes Payable of 1911 paid.....	1000.00
Luncheon of 1911.....	331.65
New Office Furniture, etc.....	102.25
Extension Fund payment.....	935.52
Cash Balance, December 20, 1912.....	824.36
	<hr/>
	\$13830.98

As mentioned in the Secretary's report a subscription of \$1000 was received in May for an extension fund. Of this fund \$935.62 have been expended as follows:

Postage	\$285.00
Printing	354.70
Addressing and Clerical Work	305.82
Circularizing Libraries	40.00
	<hr/>
	\$935.52

leaving \$64.48 still to be expended.

Of the total income for the year \$1000 has come from the fees of ten new life members, and \$700 from the voluntary contributions of fourteen old life members. These thirteen gentlemen and one lady became life members when the fee was \$50, and generously decided to attain unto equality in burden bearing with those who come after by contributing an additional \$50 each. It is a question for the Association to decide whether the dues from life memberships are to be treated as current income or as liabilities. From one standpoint it would seem that if we treat them as current income to be used in the payment of current expenses we should be consuming our capital, and that we are not really coming out even at the end of the year unless we can invest the money received from this source and pay our running expenses from the annual membership dues and the interest on the investment.

From another standpoint, one might argue that, since the number of life members is never very large and we may expect additions every year to the list, it is quite proper to regard their dues as current income. Were it not for the extraordinary number of life members who have joined during the present year, this argument would be sound. It is not probable that the receipts from this source this year will be duplicated soon. Therefore it would seem to the Treasurer that during the coming year the budget ought to be so framed as to permit the investment of at least \$1000 of the \$1700 received from this source during the present year.

The Treasurer submits the following forecast of the expenses and receipts of the Association for the year 1913.

ESTIMATED EXPENSES

Publishing Proceedings of Annual Meeting....	\$ 1000
Publishing the Handbook	500
Editing and Publishing the Amer. Econ. Review.	7000
Office of the Secretary-Treasurer.....	2500
Rent and Insurance	100
Annual Meeting	100

	\$11200

Investment of receipts from Life Memberships.. 1000

\$12200

ESTIMATED INCOME		
Membership Dues and Subscriptions	\$10000	
Sales of Publications	700	
Interest	57	
		\$10757
To be raised on Guarantee Fund	1443	
		\$12200

This forecast involves an unusual amount of guesswork, because of the rise in membership dues next year. There will probably be a number of resignations, and also a number of uncollectible dues. Assuming that 2000 out of our 2700 members and subscribers pay their five dollar dues, we shall be in excellent financial condition next year. But if the loss of membership should be larger than is anticipated it would be impossible to invest the \$1000 received from life memberships without incurring a deficit.

Respectfully submitted,

T. N. CARVER,
Treasurer,

No action was taken on the Treasurer's report until after the reading of the Auditor's report, the reading of which by Professor Cole immediately followed.

REPORT OF THE AUDITING COMMITTEE

Boston, Mass., December 28, 1912.

To the American Economic Association:

Your auditing committee reports that the accounts and vouchers of the Treasurer for the fiscal year ended December 20, 1912, have been examined in detail by assistants under the supervision of the committee.

An income and outgo statement, an exhibit of the charges and credits to the "surplus" account, and a balance sheet are submitted herewith.

Journal entries have been drawn up which provide for the closing of the books and which will bring the balances of the ledger accounts into exact accord with the exhibits given herein.

Very respectfully,

WILLIAM MORSE COLE,
CARROLL W. DOTEN,
HARVEY S. CHASE,
Auditing Committee.

INCOME AND OUTGO
FOR THE YEAR ENDED DECEMBER 20, 1912

Ordinary Income

Membership Dues	\$7032.28
Interest	57.74
	————— \$7090.02

Ordinary Outgo

Office Salaries	\$1312.47
Office Postage	295.15
Office Stationery and Printing	135.50
Office Supplies	41.17
Traveling Expenses	26.40
Insurance	67.00
Telephone and Telegraph	29.41
Express, Freight and Cartage	4.05
Storage of Publications	50.00
Annual Meeting Expenses	101.40
Losses on Defaulted Membership Dues.....	47.32
Losses on Defaulted Sales Accounts.....	4.27
Allowance for Defaulted Dues	140.00
Allowance for Returns of Publications.....	60.00
Miscellaneous	33.65 \$2347.79
Surplus of Ordinary Income	————— \$4742.23

Publication Outgo

Proceedings, Printing, etc.	\$ 706.17
Review, Printing	3220.83
Review, Editorial	1500.00
Review, Contributorial	1114.50
Review, Expenses	1087.57
	————— \$7629.07

Publication Income

Subscriptions	\$ 976.33
Sales	787.39
Guarantee Fund	2465.54 \$4229.26
	—————

Net Cost of Publications above Publication Income	\$3399.81
Normal Surplus for the Year	————— \$1342.42

SURPLUS ACCOUNT

DURING THE YEAR ENDED DECEMBER 20, 1912.

December 20, 1911. Deficit (brought forward) \$ 989.04

Credits

Normal Surplus of Income for Year (as above)	1342.42

	\$ 353.38

Special Income, 1912

Life Memberships	\$ 1700.00
"Extension Fund"	\$1000.00

Special Outgo, 1912

Campaign for Extension of Memberships.

Printing	\$354.70
Postage	235.00
Clerical Work	345.82 \$935.52

	\$ 64.48

Balance, reserved for 1913	64.48

Credit Balance at End of Year (December 20, 1912)	\$2053.38
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BALANCE SHEET—DECEMBER 20, 1912

Assets		Liabilities	
Cash	\$ 824.36	Membership Dues Prepaid.	\$ 637.31
Investment—New York City Assessment Bond	1000.00	Guarantee Fund Prepaid..	130.00
Furniture and Fixtures....	264.25	Extension Fund Balance Unused	64.48
Insurance Unexpired	32.00	Accounts Payable	41.67
Membership Dues Receiv- able	923.50	Subscriptions to Luncheon.	180.00
Other Accounts Receivable.	262.73	Allowance for Return of Publications	60.00
	_____	Allowance for Defaults in Membership Dues	140.00
	\$3306.84	Surplus	2053.38
	_____		_____
			\$3306.84

On motion, the report of the Auditing Committee was received to be placed on file, with thanks for the clearness and detail with which it was presented.

The Managing Editor of the *American Economic Review*, being absent on account of illness, sent in his report, which is as follows:

REPORT OF THE MANAGING EDITOR OF THE
AMERICAN ECONOMIC REVIEW

At the annual meeting of the Association in December, 1911, Professor Clive Day, of Yale University, was elected editor, to take the place of Professor Farnam. No meetings of the editors have been held during the year save at the time of the annual meeting.

Expenditures for the *American Economic Review* during 1912, the second year of its publication, have been \$6922.90 as compared with \$6730.59 in 1911. The chief reason for this slight increase of \$192.31 is due to the larger edition of copies printed, the number being increased from 2800 to 3300 for three of the issues and to 3200 for one of the issues.

For the principal items, the expenditures for 1912 were as follows: (For purposes of comparison the figures for 1911 are given in a parallel column.)

	1912	1911
Printing	\$3220.83	\$2495.18
Salary of editor	1500.00	1500.00
Contributors	1114.50	1320.25
Clerical assistance	794.89	865.50
Supplies	292.68	413.51
Travelling expenses of editors.		136.15
<hr/>	<hr/>	<hr/>
Total	\$6922.90	\$6730.59

The amount printed this past year has been slightly in excess of that in 1911. Volume II, 1912, contains 1038 pages as compared with 981 pages in Volume I. There has been a decrease of 51 pages in the amount of space given to leading articles and of 6 pages in space given to reviews. On the other hand, there has been an increase of 39 pages for new books listed in bibliographies and of 21 pages for documents, reports and legislation, and 53 pages for periodical abstracts.

In all, 17 leading articles have been published occupying 28 per cent of the total space; 213 books have been reviewed; and 1452 new books have been listed in bibliographies. This latter

item is to be compared with 785 new books listed in 1911. 1727 entries have been made of articles in periodicals as compared with 1074 in 1911.

DAVIS R. DEWEY,
Managing Editor.

On motion, the President was authorized to appoint a committee on nominations and a committee on resolutions. The President appointed for the committee on nominations Professors Farnam, Taussig, Patten, Barnett and Hagerty; and for the committee on resolutions Professors McCrea and Whitaker.

President Fetter then presented an invitation from San Francisco to hold its meeting for 1915 in that city and to participate in an exhibit of materials covering the social sciences.

On motion, it was voted to refer the matter of such an exhibit to the Executive Committee with power.

On motion, it was voted to authorize the Secretary to publish, during the year, the Handbook of the Association containing a list of the members.

Adjourned.

A meeting of the Executive Committee was held in Room 1, the New Lecture Hall, Harvard University, at 9 a. m., Monday, December 30. There were present President Fetter, and Professors Taussig, Seager, Commons, Hollander, McCrea, and Carver.

On motion, it was voted to omit this year the publication of the papers and discussion at the joint session with the American Association for Labor Legislation, and that arrangements be made to get the *American Labor Legislation Review* in which the report appears supplied to our members who desire it at reduced rates.

On motion, it was voted to refer to the Secretary the matter of putting in the Proceedings the whole of Professor Irving Fisher's paper with the discussions.

On motion, it was voted to allow the President to publish elsewhere his annual address if he so desires.

On motion, it was voted that it is the sense of this Committee that the responsibility for editing the Proceedings of the Annual Meeting rests with the Editorial Board, it being understood that the Secretary will edit the Proceedings for this year.

On motion, it was voted that it is the sense of this meeting that

hereafter it is desirable that the presidential address should appear as a leading article in the March number of the Review.

Adjourned to meet at 1.30 at Sanders Theater.

The adjourned meeting of the Executive Committee was held at 1.30 p. m., in Sanders Theater, Harvard University. There were present President Fetter, and Professors Taussig, Farnam, Commons, Clark, Patten, Seager, Carver, and Dr. Durand.

On motion, it was voted to refer the question of a recommendation regarding the accrediting of work done on efficiency commissions to a committee consisting of Professors Fetter, Farnam, and Taussig, to recommend at their discretion.

Adjourned.

A second business meeting of the Association was held on Tuesday, December 31, at 9 a. m., at the Copley Plaza, as announced in the program.

The committee on nominations, through Professor Farnam, reported the nomination of the following officers for 1912:

For President,

Professor David Kinley, University of Illinois.

For Secretary and Treasurer,

Professor T. N. Carver, Harvard University.

For Vice-Presidents,

1. Professor John H. Gray, University of Minnesota,

2. Dr. C. W. Macfarlane, Philadelphia, Pa.,

3. Professor W. E. Hotchkiss, Northwestern University.

For members of the Executive Committee (succeeding H. R. Seager and F. H. Dixon),

Professor M. B. Hammond, Ohio State University,

Professor W. A. Scott, University of Wisconsin.

For members of the Editorial Board (succeeding Henry B. Gardner and Henry C. Taylor),

Professor H. B. Gardner, Brown University,

Dr. John L. Coulter, The Census Bureau, Washington, D. C.

On motion, the Secretary was instructed to cast a ballot for the persons nominated, and they were declared elected.

The committee on resolutions submitted the following report, which the Secretary was instructed to include in the records of the meeting.

REPORT OF THE COMMITTEE ON RESOLUTIONS

"The American Economic Association in closing its meeting in 1912, wishes to express sincere appreciation of the distinguished hospitality that has marked our stay in Boston. Local organizations, citizens, and the press have united to make this one of the most noteworthy and enjoyable meetings we have ever held.

"Be it therefore resolved: that the Secretary be requested to make in the minutes formal record of these sentiments, and to transmit copies of these resolutions especially to the general Committee on Social Arrangement, to the special Committee of Local Members, to President and Mrs. A. Lawrence Lowell, to the President and Fellows of Harvard University, to the President of the Massachusetts Institute of Technology, and to the City, University, College, and St. Botolph Clubs.

"Respectfully submitted,

Roswell C. McCrea,
A. C. Whitaker."

The sub-committee appointed by the Executive Committee on the question of a recommendation regarding accrediting work done on efficiency commissions presented the following report:

"Voted, that the suggestion made by Mr. MacCarthy be referred to the Executive Committee, with power to refer it to a sub-committee, which may be authorized to confer with the American Political Science Association and also to report directly to this Association."

On motion, it was voted to refer to the Executive Committee the question of the place of meeting next year, but that this meeting should express a preference for Minneapolis.

Adjourned.